Annexure-I

NATIONAL BOARD OF ACCREDITATION

FORMAT FOR
SELF ASSESSMENT REPORT (SAR)
FOR ACCREDITATION OF
UG ENGINEERING PROGRAMMES
(TIER-I)

`

4th Floor East Tower, NBCC Place
BhishamPitamah Marg, PragatiVihar
New Delhi 110003
P: 91(11)24360620-22, 24360654
Fax: 91(11) 24360682
(September, 2015)

Contents

Self Assessment Report (SAR)

Part A

I. Institutional Information

I.1. Name and address of the institution and affiliating university:

MADAN MOHAN MALAVIYA UNIVERSITY OF TECHNOLOGY, DEORIA ROAD, GORAKHPUR-273 010 (UP)

I.2. Name, designation, telephone number, and e-mail address of the contact person for the NBA:

Prof. Onkar Singh, Vice Chancellor
Tel: 0551-2273958, 09235500501,
E-mail: vc@mmmut.ac.in
Fax: 0551-2270011

I.3. History of the institution (including the date of introduction and number of seats of various programmes of study alongwith the NBA accreditation, if any) in a tabular form:

Year	Description
	Institution started with the following programmes (Intake strength):
1962	B.E. in Civil Engineering (20)
1962	B.E. in Electrical Engineering (20)
1962	B.E. in Mechanical Engineering (30)
	Addition of following new programmes:
1973	B.E. in Electronics Engineering (30) which was renamed as Electronics and Communication Engineering in subsequent years.
1984	B.E. in Computer Science (20)which was renamed as Computer Science and Engineering in subsequent years.
	Increase in intake strength
1989	B.E. in Computer Science & Engineering (30)
1991	B.E. in Electronics & Communication Engineering (45)
1994	B.E. in Civil Engineering (30)
1994	B.E. in Electrical Engineering (45)
1994	B.E. in Mechanical Engineering (45)
2001	B.Tech. in Computer Science & Engineering (75)
2008	B.Tech. in Electronics & Communication Engineering (75)
2008	B.Tech. in Civil Engineering (45)
2008	B.Tech. in Electrical Engineering (60)
2010	B.Tech. in Mechanical Engineering (60)
2010	B.Tech. in Civil Engineering (60)
2015	B.Tech.in Civil Engineering (120)

2015	B.Tech.in Electrical Engineering (120)
2015	B.Tech.in Mechanical Engineering (120)
2015	B.Tech.in Electronics & Communication Engineering (120)
2015	B.Tech.in Computer Science & Engineering (120)
	NBA-AICTE Accreditation visits and accreditation granted
2003	B. Tech. in Civil Engineering (Accredited for 3 years)
2003	B. Tech. in Mechanical Engineering (Accredited for 3 years)
2003	B. Tech. in Electronics & Communication Engineering (Accredited for 3 years)
2005	B. Tech. in Electrical Engineering (Accredited for 3 years)
2005	B. Tech. in Computer Science & Engineering (Accredited for 3 years)
	NBA-AICTE Accreditation visits and accreditation granted
2007	B. Tech. in Civil Engineering (Accredited for 3 years)
2007	B. Tech. in Mechanical Engineering (Accredited for 3 years)
2007	B. Tech. in Electronics & Communication Engineering (Accredited for 3 years)
2009	B. Tech. in Electrical Engineering (Accredited for 3 years)
2009	B. Tech. in Computer Science & Engineering (Accredited for 3 years)

I.4. Ownership status: Govt. (central/state) / trust / society (Govt./NGO/private) / private/ other:

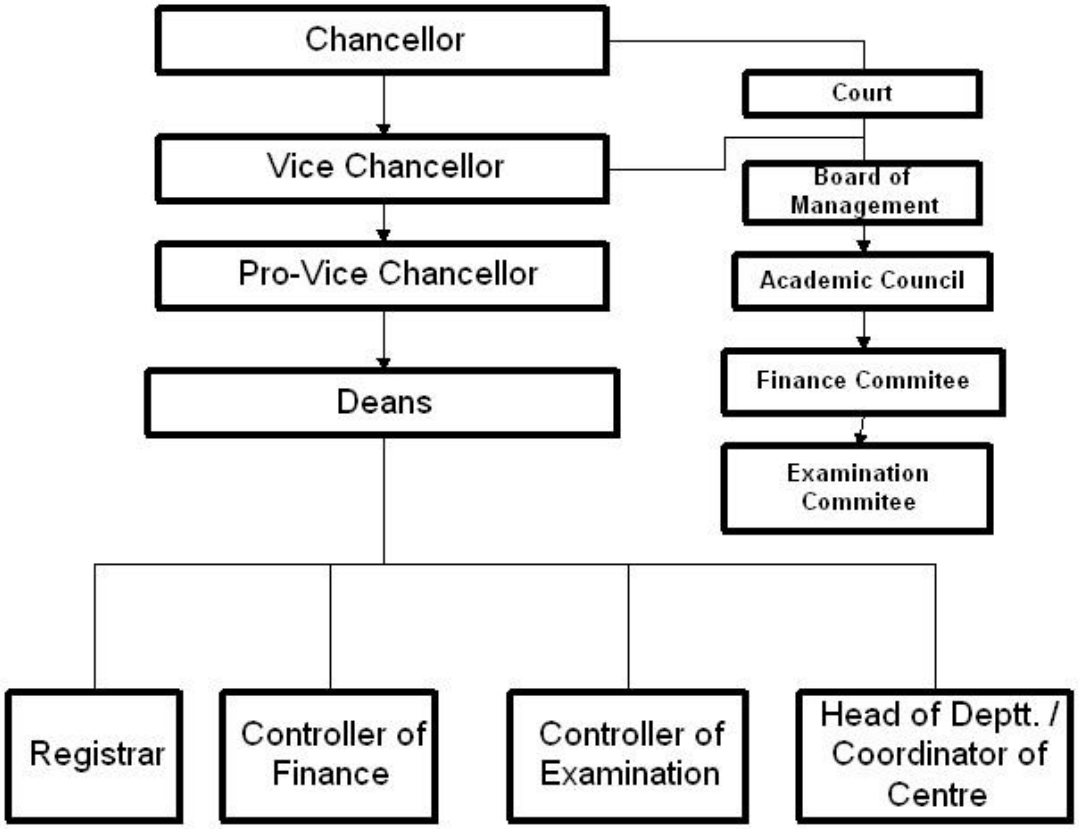
State Government of Uttar Pradesh
Non Affiliating State Technological University vide Act No. 22/2013 of Uttar Pradesh State Government w.e.f. 01.12.2013 through State Government Notification No.2998(1)/Solah-12013-3(18)/2012TC-II, dated 28th November, 2013

I.5. Mission and Vision of the Institution:

VISION	
To facilitate and promote studies, research, technology incubation, product innovation and extension work in Science, Technology and Management Education, and also to achieve excellence in higher technical education	
MISSION	
Mission-1	To serve society as a center of higher learning, providing long-term societal benefits through transmitting advanced knowledge, discovering new knowledge and functioning as an active working repository of organized knowledge;
Mission-2	To take leadership role by providing need based programs in engineering and technology, applied sciences, management, humanities, architecture, pharmacy, retail and fashion design, mass-communication, agriculture and other employable courses in emerging areas;
Mission-3	To promote compassionate care of the highest quality that translates new knowledge into meaningful improvements in technological outcomes

	through interdisciplinary collaboration, fiscal responsibility, support of diversity, a focus on quality and a culture of professionalism;
Mission-4	To establish value creating networks and foster relationship with other leading institutes of higher learning and research, alumni and industries in order to provide significant contribution to national and international development;
Mission-5	To create an intellectually stimulating infrastructure and conducive environment for technology research, scholarship, creativity, innovation, entrepreneurship and professional activity for service to community and economy.

I.6. Organizational Structure:



Organisational Structure of MMMUT, Gorakhpur

THE COURT

1. Sri Ram Naik, Chancellor & Honourable Governor of U.P.
2. Prof. Onkar Singh, Vice Chancellor
3. Prof. R. Yadav, Ex- Director, NIT Jamshedpur
4. Prof. S. K. Balsubramaniyan, IIT (BHU), Varanasi
5. Prof, B. Chandrashekhar, IIT Kanpur
6. Prof. R. R. Mishra, BITS, Pilani
7. Prof. Devi Singh, Ex- Director, IIM, Lucknow
8. Principal Secretary, Finance Department, U.P. Govt.
9. Principal Secretary, Higher Education Department, U.P. Govt.
10. Principal Secretary, Technical Education Department, U.P. Govt.
11. UGC Nominee
12. Sri C. Kandasamy, Director General (Road Development) & Special Secretary, Ministry of Road Transport & Highway, New Delhi - AICTE Nominee

BOARD OF MANAGEMENT

Chairman

Prof. Onkar Singh
Vice-Chancellor
Madan Mohan Malaviya University of Technology, Gorakhpur

Members (Uttar Pradesh Government Nominees)

- **Prof. Shyam Lal**
  Mathematics Department, BHU, Varanasi
- **Prof. Naveen Kumar**
  Head, Mechanical Engineering Department, D.T.U, Delhi
- **Prof. N K Sharma**
  I.I.T., Kanpur
- **Sri S. K. Agrawal**
  Managing Director, S. K. Chemicals Pvt. Ltd. Gorakhpur
- **Two Professors of the University**
- **Two Deans of the University**

Members (Ex-Officio)

- **Principal Secretary/Secretary, Finance Department**
- **Principal Secretary/Secretary, Higher Education Department**
- **Principal Secretary/Secretary, Technical Education Department**

Secretary (Ex-Officio)

- **Sri K. P. Singh,**
  Registrar
  Madan Mohan Malaviya University of Technology, Gorakhpur

ACADEMIC COUNCIL

Chairman

Prof. Onkar Singh
Vice-Chancellor
Madan Mohan Malaviya University of Technology, Gorakhpur

Members

- **Prof. Sanjay Mittal**
  Aerospace Department, I. I.T., Kanpur

- **Sri Rajendra Kumar Jalan**
  Chairman, Council for Leather Export India, Kanpur
- **Prof. Dharmendra Singh Sengar**
  I.I.M., Lucknow
- **Prof. H Devraj**
  Vice Chairman, University Grants Commission,
  Bahadur Shah Zafar Marg, New Delhi
- **Prof. Animesh Das**
  Professor, Department of Civil Engineering, I. I.T., Kanpur
- **Sri Mohd. Azam Khan**
  Managing Director/President, Industrial Association
  M/S A. R. P. Industries, GIDA, Gorakhpur
- **All Deans of the University**
- **Prof. Udai Shanker**
  Professor, Computer Sc. & Engineering Department
- **Prof. B. S. Rai**
  Professor, Electronics and Communication Engineering Department
- **Prof. K. G. Upadhyay**
  Professor, Electrical Engineering Department
- **All Head of Schools / Departments**
- **Examination Controller**
- **Dr. Arjun Dubey**
  Associate Professor, Applied Science Department
- **Sri R. N. Mall**
  Assistant Professor, Mechanical Engineering Department
  Other such members as prescribed by the University Act
- **Secretary (Ex-Officio)**
- **Sri K. P. Singh**
  Registrar
  Madan Mohan Malaviya University of Technology, Gorakhpur

FINANCE COMMITTEE

Chairman

Prof. Onkar Singh
Vice-Chancellor
Madan Mohan Malaviya University of Technology, Gorakhpur

Members (Ex-Officio)

- Principal Secretary / Secretary
  Department of Finance, Govt. of Uttar Pradesh
- Principal Secretary / Secretary
  Department of Technical Education, Government of Uttar Pradesh

Members (BOM Nominees)

- Prof. Naveen Kumar
  Delhi Technical University, Delhi
- Prof. N. K. Sharma
  I.I.T., Kanpur
- Members (Ex-Officio)

Registrar
Madan Mohan Malaviya University of Technology, Gorakhpur

Secretary(Ex-Officio)

- Controller of Finance
- Such Other Members as may be prescribed by the Statues

EXAMINATION COMMITTEE

Chairman

Prof. Onkar Singh
Vice-Chancellor
Madan Mohan Malaviya University of Technology, Gorakhpur

Members

- Dr. V. K. Giri
  Professor, Electrical Engineering Department
- Dr. S. K. Srivastava
  Professor, Mechanical Engineering Department
- Dr. V. K. Singh
  Ex- Pro- Vice-Chancellor, U.P. Technical University, Lucknow, Professor, Mathematics Department, I.E.T., Lucknow
- Dr. A. K. Saxena
  Professor, Department of Electrical Engineering, Dayal Bag Educational Institute, Dayal Bag, Agra
- All Deans of the University
- Secretary (Ex-Officio)
  Controller of Examination

ADMINISTRATIVE COMMITTEE

Chairman

Pro Vice Chancellor or Dean, Faculty Affairs in his absence

Members

- Dean, Student Affairs
- Dean, Planning, Resource generation and Alumni Relations
- Dean, Post Graduate Studies and Research & Development
- Dean, Under Graduate Studies and Entrepreneurship
- Registrar
  Controller of Finance

PURCHASE COMMITTEE

Committee for the purchase of the items costing more than one lac:

Convener
Controller of Finance

Members

- Registrar
- Respective HOD/ Sectional Officer/Principal Investigator of research Projects (Only for

Research Projects)

- Two Members nominated by Hon'ble Vice Chancellor as per nature of the items to be purchased.

Committee for the purchase of the items costing less than one lac:

Chairman

Respective HOD/ Sectional Officer

Members

- One Faculty Member nominated by Head of Department/Sectional Officer
- Principal Investigator of Research Projects (Only for Research Projects)
- One External faculty member nominated by Hon'ble VC

ACADEMIC AFFAIRS COMMITTEE

Chairman

Pro Vice Chancellor or Dean, Faculty Affairs in his absence

Members

- Dean, Student Affairs
- Dean, Planning, Resource Generation and Alumni Relations
- Dean, Post Graduate Studies and Research and Development
- Dean, Under Graduate Studies and Entrepreneurship
- All Head of Departments
- Examination Controller
- Registrar

REGISTRAR

Teaching Supporting Technical Staff

- System Manager
- Computer Programmers
- Computer Operators
- Workshop Superintendent
- Foreman
- SLT/JLT
- Mechanic Grade-A & Grade-B
- Horticultural Assistant
- Draftsman
- Such other technical staff as decided by the Board/Govt.

Administrative (Non-Teaching Staff)

- Medical Officers
- Engineers (Assistant/Junior)
- Stores officer
- Librarian
- Deputy Librarian
- Assistant Librarian
- S N D (Senior Noter and Drafter)
- Routine Grade Clerk (RGC)
- Such other staff as decided by the Board/Govt.

CONTROLLER OF FINANCE

- Account Officer
- Internal Auditor
- Cashier
- Bill Clerk

CONTROLLER OF EXAMINATION

- Additional Controller of Examination
- Assistant Controller of Examination
- Centre Superintendent
- Assistant Centre Superintendents

HEAD OF DEPARTMENT

- Chairman, Departmental Advisory Group
- Chairman, Under-Graduate Studies Committee
- Chairman, Exams Committee
- Chairman, Time Table Committee
- Chairman, General Maintenance Committee
- Chairman, Departmental Library Committee
- Chairman, Project Monitoring Committee
- Chairman, Seminar Monitoring Committee
- Chairman, Industrial Training Monitoring Committee
- Chairman, Industrial Tour Committee
- Chairman, Website Management Committee
- Chairman, Departmental Alumni Committee
- Chairman, Departmental Grievance Redressal Cell
- Chairman, Departmental Career Guidance Cell
- Chairman, Departmental Training & Placement Cell
- Chairman, Departmental Entrepreneurship Cell
- Chairman, Association of Civil Engineers (ACE)
- Chairman, Innovation Cell
- Chairman, Laboratory Management Committee
- Special Lectures Management Committee

DIFFERENT CELLS/COMMITTEES

For the smooth functioning of the University, there exist following Cells/Committees.

CAMPUS DEVELOPMENT CELL

Chairman

Prof. V. K. Giri
Professor, EED

- Member — Dr. R. K. Lal, Assistant Professor, MED
- Member — Sri Manoj Baloni, Audit Assistant

- Member Sri Ram Bahal Yadav, R.G.C.
- Member Sri Ravi Mohan Srivastava, R.G.C.
- Member Secretary Sri D. S. Singh, Assistant Professor, CSED

COMMUNITY DEVELOPMENT CELL

Chairman

Dr. Sudhir Kumar Srivastava
Associate Professor, EED

- Member Sri M. K. Srivastava, Assistant Professor, CSED
- Member Sri Ram Bilas Prasad, Assistant Professor, MED
- Member Ms Sana Zafar, Assistant Professor, CED
- Member Ms. Sneha Gupta, Assistant Professor, CED
- Member Secretary Dr. Sudhanshu Verma, Assistant Professor, ECED

UNIVERSITY SPACE ADVISORY COMMITTEE

Chairman

Dean, Planning

- Member Dean, Academics
- Member Dean, Student Affairs
- Members Dean, Research and Development
- Members Finance Controller
- Convener Head, Civil Engineering Department

ENVIRONMENTAL ADVISORY COMMITTEE

Chairman

Dean, Planning

- Member Dean, Academics
- Member Dean, Student Affairs
- Member Dean, Research and Development
- Member Registrar
- Convener Dr. Govind Pandey, Associate Professor, CED

GRIEVANCES REDRESSAL COMMITTEE (GRC)

Chairman

Dean, Student Affairs

- Member Dean, Under Graduate Studies and Entrepreneurship
- Member Dean, Planning, Resource Generation and Alumni Relations
- Member Dean, Post Graduate Studies and Research & Development
- Member Registrar
- Member Controller of Finance
- Member Secretary Proctor

ELECTRONIC DATA PROCESSING CELL (EDP)

Chairman

Dr. S. P. Singh
Associate Professor, CSED

- Member Sri M. K. Srivastava, Assistant Professor, CSED
- Member Ms. Sana Zafer, Assistant Professor, CED

- Member Sri K. B. Sahay Assistant Professor, EED
- Member Sri. G. D. Bharti, Assistant Professor, ECED
- Member Dr. A. K. Mishra, Assistant Professor, CED
- Member Sri R. B. Prasad, Assistant Professor, MED
- Member Dr. Harish Chandra, Assistant Professor, ASD

INTERNAL QUALITY ASSURANCE CELL (IQAC)

Chairman

Prof. Onkar Singh
Vice-Chancellor, MMMUT, Gorakhpur

- Member Prof. S. M. Ali Jawaid, Professor, CED
- Member Prof. B. S. Rai, Professor, ECED
- Member Prof. K. G. Upadhyay, Professor, EED
- Member Prof. D. K. Dwivedi, Associate Professor, ASD
- Member Prof. V. K. Giri, Professor, EED
- Member Dr. Sri Ram, Associate Professor, CED
- Member Dr. A. K. Sharma, Associate Professor, CSED
- Member Dr. U. C. Jaiswal, Associate Professor, CSED
- Member Dr. S. K. Srivastava, Professor, MED
- Member Dr. Gopinath, Professor, M.B.A., DDU, Gorakhpur University
- Member Er. S. K. Agrawal, MD, S.K. Chemicals, Gorakhpur
- Member Er. R. N. Singh, Secretary, Chamber of Industries, Gorakhpur
- Member Prof. Udai Shanker, Professor &Head, CSED
  Secretary

STUDENT COUNSELING CELL

Chairman

Prof. K.G. Upadhyay
Professor, EED

- Member Major G. S. Tripathi, Associate Professor, ECED
- Member Dr. S. P. Singh, Associate Professor, CSED
- Member Ms. Sunayana, Assistant Professor, CED
- Member Ms Swati Gangwar, Assistant Professor, MED
- Member Sri Gagandeep Bharti, Assistant Professor , ECED
- Member Secretary Dr. Amit Kumar Barnwal, Assistant Professor, ASD

UNIVERSITY WOMEN GRIEVANCE REDRESSAL CELL

Chairman

Smt. Meenu
Assistant Professor, CSED

- Member Ms Swati Gangwar, Assistant Professor, MED
- Member Smt. Indra Srivastava, R.G.C.
- Member Smt. Shadma Mirza, R.G.C.
- Member Ms. Kanchan Singh, Attendant

ADMISSION CELL

Coordinator

Prof. S.K. Srivastava
Professor, MED

Deputy Coordinator

- Dr. U. C. Jaiswal, Associate Professor, CSED

Assistant Coordinator

- Sri Awadhesh Kumar, Assistant Professor, EED
- Sri R.B. Prasad, Assistant Professor, MED
- Dr. Amit Barnawal, Assistant Professor, ASD

Members

- Member, Controller of Finance, MMMUT, Gorakhpur
- Member (Ex-officio) Sri K. P. Singh, Registrar, MMMUT, Gorakhpur

RESEARCH AND CONSULTING MANAGEMENT COMMITTEE

Chairman

Prof. K.G. Upadhyay
Professor, EED

- Member Prof. B.S. Rai, Nominated by Management Board
- Member Prof. Udai Shanker, Nominated by Vive Chancellor
- Member Prof. V. K. Giri, EED, Nominated by Vive Chancellor
- Member Finance Controller, MMMUT, Gorakhpur
- Member Secretary Registrar, MMMUT, Gorakhpur

INDUSTRY-INSTITUTE-INTERACTION CELL

Chairman

Prof. Udai Shanker
Professor, CSED

- Member Prof. S. M. Ali Jawed, Professor & HOD, CED
- Member Prof. V. K. Giri, Professor, EED
- Member Prof. S. K. Srivastava, Professor &HOD, MED
- Member Sri G. S. Tripathi, HOD, ECED
- Member Dr. P. K. Singh, Associate Professor, CSED
- Member Dr. S. P. Singh, Associate Professor,CSED
- Member Ms. Sunayana, Assistant Professor, CED
- Member Sri Ram Bilas, Assistant Professor, MED
- Member Sri K. B. Sahay, Assistant Professor, EED
- Member Dr. Sudhanshu Verma, Assistant Professor, ECED
- Member Sri K. L. Chauhan, IGL, GIDA, Gorakhpur
- Member Sri H. R. Jaiswal, MD, Urja Gasifier, Gorakhpur
- Members Two- two, students Nominated by HOD of B.Tech./MCA/ MBA
- Member Secretary Sri Rajan Mishra, Coordinator, T & P

ACADEMIA INDUSTRY CELL

Chairman

Prof. S. K. Srivastava
Professor, MED

- Member Dr. S. C. Jaiswal, Associate Professor, MED
- Member Dr. R. K. Chauhan, Associate Professor, ECED
- Member Dr. Rakesh Kumar, Associate. Prof. CSED

- Member Dr. D. K. Dwivedi, Associate Professor, ASD
- Member Dr. A. K. Mishra, Assistant Professor, CED
- Member One-one students from B. Tech and M. Tech. from all the branches
- Member Sri K. L. Chauhan, IGL, GIDA, Gorakhpur
- Member Sri H. R. Jaiswal, MD, Urja Gasifier, Gorakhpur Member:
- Member Secretary Dr. U. C. Jaiswal, Associate Professor, CSED

UNIVERSITY ADMISSION COMMITTEE

Chairman

All Deans of the University, out of which one of the Dean shall be nominated by Hon'ble Vice Chancellor as Chairman of UAC and remaining shall be members

- Member Representative of SC\ST nominated by Hon'ble VC
- Member Representative of OBC nominated by Hon'ble VC
- Member Registrar
- Member Controller of Finance
- Coordinator To be nominated by Hon'ble VC

COUNCIL OF STUDENT ACTIVITIES (CSA)

Chairman

Dr. S. M. Ali Jawaid
Professor, CED

- Member O/Cs of Different Games & Sports (Faculty Members of the University)
- Member Captains of Different games and Sports (Students of the University)
- Member O/C Cultural Activities ((Faculty Members of the University)
- Member Cultural Secretary (Students of the University)

I.7. Financial status: Govt. (central/state) / grants-in-aid / not-for-profit / private self-financing / other:

State Government of Uttar Pradesh

I.8. Nature of the trust/society:

Non Affiliating State Technological University vide Act No. 22/2013 of Uttar Pradesh State Government

Also list other institutions/universities run by the trust/society: **Not Applicable**

I.9. External sources of funds:

Name of the External Source	**2015-16**	**2014-15**	**2013-14**	**2012-13**
State Govt. Aid (Non-Plan) Rs.(Lakhs)	961.32	421.15	421.15	421.15
State Govt. Aid (Plan) Rs.(Lakhs)	1854.09	2594.33	20.00	20.00

I.10. Internally acquired funds:

Name of the Internal Source	**2015-16**	**2014-15**	**2013-14**	**2012-13**
Students' Fee Rs.(Lakhs)	965.35	756.76	650.00	607.65
User Charges (Lakhs)	603.49	603.49	467.19	336.10
Other Internal RevenueRs.(Lakhs)	503.98	503.98	391.65	233.50

I.11 Scholarships or any other financial assistance provided to students?

Details		**2015-2016 Rs.**	**2014-2015 Rs.**	**2013-2014 Rs.**	**2012-2013 Rs.**
Category	*SC/ST*	*****State government is in the process of disbursement.	10400315.00	11557375.00	13074070.00
	OBC		22116385.00	20369305.00	20490695.00
	Gen		18892270.00	20202170.00	18905655.00
	Minority		2064725.00	1223630.00	1194790.00
Scholarship Assistance (excluding GATE Scholarship)		6651000.00	4320000	1680000	------
Total		6651000.00 + *****	57793695	55032480	53665210.00

I.12 Basis/criterion for admission to the institution:

All India entrance / state- level entrance / university entrance / 12th standard mark sheet / others:

All India Level Entrance Examination conducted by M.M.M. University of Technology, Gorakhpur, U.P.

I.13Total number of engineering students: B.Tech

	2015-2016	**2014-2015**	**2013-2014**	**2012-2013**
Total no. of boys	1436	1228	1094	1099
Total no. of girls	396	297	284	283
Total no. of students	**1832**	**1525**	**1378**	**1382**

Total number of Engineering Postgraduate students: M.Tech.

	2015-2016	**2014-2015**	**2013-2014**	**2012-2013**
Total no. of boys	274	280	266	205
Total no. of girls	108	98	90	50
Total no. of students	**382**	**378**	**356**	**255**

Total number of other students: MCA & MBA

	2015-2016	2014-2015	2013-2014	2012-2013
Total no. of boys	183	189	202	198
Total no. of girls	104	89	58	57
Total no. of students	**287**	**278**	**260**	**255**

I.14 Total number of employees

Minimum and maximum number of staff on roll in the engineering institution, during the CAY and the previous CAYs (1st July to 30th June):

A. Regular Staff

Items		**2015-2016**		**2014-2015**		**2013-2014**		**2012-2013**	
		Min	**Max**	**Min**	**Max**	**Min**	**Max**	**Min**	**Max**
Teaching staff in Engineering	M	43	46	37	44	37	37	35	35
	F	04	05	01	04	01	01	01	01
Teaching staff in Science & Humanities	M	08	11	06	08	08	08	08	08
	F	00	00	00	01	00	00	00	00
Non-teaching staff	M	203	207	207	210	210	217	217	222
	F	19	20	20	20	20	20	20	21

B. Contract Staff

Items		**2015-2016**		**2014-2015**		**2013-2014**		**2012-2013**	
		Min	**Max**	**Min**	**Max**	**Min**	**Max**	**Min**	**Max**
Teaching staff in Engineering	M	26	29	20	22	23	25	23	23
	F	10	11	09	10	10	12	09	11
Teaching staff in Science & Humanities	M	05	06	04	04	06	06	04	06
	F	04	04	04	04	03	04	04	05
[#]Non-teaching staff	M	22	22	22	22	22	22	22	22
	F	02	02	02	02	02	02	02	02

[#]As per the University policy, in addition to the contractual non teaching staff is also hired through service provider till the regular appointment is made

II. Departmental Information

II.1.Name and address of the department:

Civil Engineering Department
Madan Mohan Malaviya University of Technology, Gorakhpur
Deoria Road, Gorakhpur,Uttar Pradesh -273010

II.2. Name, designation, telephone number, and e-mail address of the contact person for the NBA:

Prof. S. M. Ali Jawaid
Professor & Head
Telephone No. 0551-6050026 (O)
Mobile No. 09235500523
Email: smajce@mmmut.ac.in, smaj@rediffmail.com

II.3. History of the department including date of introduction and number of seats of various programmes of study along with the NBA accreditation ,if any:

Program	Description
UG in Civil Engineering	Started with **30*** seats in**1962** Intake increased to **45*** in **2008-09**
	Intake increased to **60*** in **2010-11** Intake increased to **120*** in **2015-16** (* Numbers are excluding supernumerary seats)
	Accredited by NBA-AICTE in **2003** for **3** years Accredited by NBA-AICTE in **2007** for **3** years
PG in	Hill Area Development Engg.
	Environmental Engg.
	Structural Engineering
	Seismic Design and Earthquake Engineering

II.4. Mission and Vision of the Department
(The department is required to specify its Mission and Vision).

Vision

To become a premier centre of learning and research in Civil Engineering, nurturing sustainable development by the year 2025.

Mission

I. To provide the quality education in the area of Civil Engineering to transform students into graduates with high professional values.
II. To share and disseminate expertise for use in the solution of problems faced by Civil engineering industry and by society.

III. To ensure the continuous improvement in the quality of life of people in the society.
IV. To conduct need based research projects giving priority to the needs of industry

II.5. List of the programmes/ departments which share human resources and/or the facilities of this programmes/ departments (in %):

(Instruction: The institution needs to mention the different programmes being run in the department which share the human resources and facilities with this department/programme being accredited.)

- Mechanical Engineering (5.46%)
- Electrical Engineering (5.46%)
- Electronics and Communication Engineering (5.46%)

II.6.Total number of students:

UG: 357

II.7. Minimum and maximum number of staff on roll during the current and three previous academic years (1st July to 30th June) in the department:

Items	2015-2016		2014-2015		2013-2014		2012-2013	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
Teaching staff in the department	11.5	20.5	8	18	8	18	9	15
Non-teaching staff	9	9	9	9	9	10	10	10
Total	**20.5**	**29.5**	**17**	**27**	**17**	**28**	**19**	**25**

Numbers mentioned are including Permanent Teachers, Contractual Faculty and Research cum Teaching Fellow/2

II.7.1. Summary of budget for the CFY and the actual expenditure incurred in the CFYm1, CFYm2 and CFYm3 (for the Department):

\

Items	Budgeted in 2015-2016(Rs. In Lakhs)*	Actual expenses In 2015-2016 (till...) (Rs. In Lakhs)	Budgeted in 2014-2015(Rs. In Lakhs)#	Actual Expenses in 2014-2015(Rs. In Lakhs) #	Budgeted in 2013-2014(Rs. In Lakhs) #	Actual Expenses in 2013-2014(Rs. In Lakhs) #	Budgeted in 2012-2013(Rs. In Lakhs) #	Actual Expenses in 2012-2013(Rs. In Lakhs) #
Laboratory equipment	4.00	Financial year is yet to be close.	30.00	30.00	15.00	4.57	7.60	7.39
Software	5.00		30.00	26.40	20.00	18.47	60.00	56.23
Laboratory consumable	1.00		12.28	12.28	06.00	5.76	12.00	6.08
Maintenance and spares	4.00		190.45	190.45	85.00	49.56	65.00	54.50
Training and Travel	1.00		37.15	37.15	20.00	18.03	17.50	17.25
Miscellaneous expenses for academic activities	0.50		03.30	03.30	03.00	2.37	3.00	11.52
Total	15.50		303.18	299.58	149.00	98.76	165.10	152.97

*Apart from the provisioned budget extra fund are made available depending upon genuinity of need in the department.

Till 2014-15 department wise separate allocation was not made. The central budget was distributed as per need.

III. Programme Specific information

III.1.Name of the Programme

Under Graduate (UG)

B. Tech. in Civil Engineering

List name of the programme, as it appears on the graduate's certificate and transcript, and abbreviation used for the programme

III.2.Title of the Degree

(List name of the degree title, as it appears on the graduate's certificate and transcript, and abbreviation used for the degree.)

Bachelor of Technology in Civil Engineering

III.3.Name, designation, telephone number, and e-mail address of the Programme coordinator for the NBA:

Prof. S.M.Ali.Jawaid
Professor & Head
Telephone No. 0551-6050026
Mobile No. 9235500523
Email: smajce@mmmut.ac.in, smaj@rediffmail.com

III.4 History of the programme along with the NBA accreditation, if any

Programme of Study	**Description**
UG in Civil Engineering	Started with **30** *seats in **1962** Intake increased to **45*** in **2008-2009** Intake increased to **60*** in **2010-11** Intake increased to **120*** in **2015-16** Numbers are excluding supernumerary(*)
	Accredited by NBA-AICTE in **2003** for **3** years Accredited by NBA-AICTE in **2007** for **3** years

III.5. Deficiencies, weaknesses/concerns from previous accreditations:

Weaknesses:

(i) Inadequate faculty positions with respect to increase intake of students.
(ii) Computer literacy of supporting staff is poor.
(iii) Poor medical facilities

III.6. Total number of students in the programme:

Total Number of Students: **357**

III.7. Minimum and maximum number of staff for the current and three previous academic years (1st July to 30th June) in the programme:

Items	**2015-2016**		**2014-2015**		**2013-2014**		**2012-2013**	
	Min.	**Max.**	**Min.**	**Max.**	**Min.**	**Max.**	**Min.**	**Max.**
Teaching staff in the department	11	20	8	18	8	18	9	15
Non-teaching staff	9	9	9	9	9	10	10	10
Total	**20**	**29**	**17**	**27**	**17**	**28**	**19**	**25**

III.8. Summary of budget for the CFY and the actual expenditure incurred in the CFYm1, CFYm2 and CFYm3 (exclusively for this programme in the department):

Items	Budgeted in 2015-2016(Rs. In Lakhs)*	Actual expenses In 2015-2016 (till...) (Rs. In Lakhs)	Budgeted in 2014-2015(Rs. In Lakhs)#	Actual Expenses in 2014-2015(Rs. In Lakhs) #	Budgeted in 2013-2014(Rs. In Lakhs) #	Actual Expenses in 2013-2014(Rs. In Lakhs) #	Budgeted in 2012-2013(Rs. In Lakhs) #	Actual Expenses in 2012-2013(Rs. In Lakhs) #
Laboratory equipment	4.00	Financial year is yet to be close.	30.00	30.00	15.00	4.57	7.60	7.39
Software	5.00		30.00	26.40	20.00	18.47	60.00	56.23
Laboratory consumable	1.00		12.28	12.28	06.00	5.76	12.00	6.08
Maintenance and spares	4.00		190.45	190.45	85.00	49.56	65.00	54.50
Training and Travel	1.00		37.15	37.15	20.00	18.03	17.50	17.25
Miscellaneous expenses for academic activities	0.50		03.30	03.30	03.00	2.37	3.00	11.52
Total	15.50		303.18	299.58	149.00	98.76	165.10	152.97

*Apart from the provisioned budget extra fund are made available depending upon genuinity of need in the department.

Till 2014-15 department wise separate allocation was not made. The central budget was distributed as per need.

PART B

I. Vision, Mission and Programme Educational Objectives (100)

1.1. Vision and Mission (5)

1.1.1. State the Vision and Mission of the institute and department (1)

Vision (University)

To facilitate and promote studies, research, technology incubation, product innovation and extension work in Science, Technology and Management Education, and also to achieve excellence in higher technical education.

Mission (University)

The distinctive mission of the University is:

1) to serve society as a center of higher learning, providing long-term societal benefits through transmitting advanced knowledge, discovering new knowledge and functioning as an active working repository of organized knowledge;

2) to take leadership role by providing need based programs in engineering and technology, applied sciences, management, humanities, architecture, pharmacy, retail and fashion design, mass-communication, agriculture and other employable courses in emerging areas;

3) to promote compassionate care of the highest quality that translates new knowledge into meaningful improvements in technological outcomes through interdisciplinary collaboration, fiscal responsibility, support of diversity, a focus on quality and a culture of professionalism;

4) to establish value creating networks and foster relationship with other leading institutes of higher learning and research, alumni and industries in order to provide significant contribution to national and international development;

5) to create an intellectually stimulating Infrastructure and conducive environment for technology research, scholarship, creativity, innovation, entrepreneurship and professional activity for service to community and economy.

Vision (Department)

To become a premier centre of learning and research in Civil Engineering, nurturing sustainable development by the year 2025.

Mission (Department)

I. To provide the quality education in the area of Civil Engineering to transform students into graduates with high professional values.
II. To share and disseminate expertise for use in the solution of problems faced by Civil engineering industry and by society.

III. To ensure the continuous improvement in the quality of life of people in the society.

IV. To conduct need based research projects giving priority to the needs of industry

(List and articulate the vision and mission statements of the institute and department)

1.1.1. Indicate how and where the Vision and Mission are published and disseminated (2)

The vision and mission of the department are published in:

- University's Brochure
- University's website
- Departmental notice board
- Department's Brochure
- Hoardings in the Department of Civil Engineering.

The vision and mission of the department are disseminated among alumni through meetings in the form of Alumni Meet, through website and brochure and widely discussed by teachers with the students and parents.

(Describe in which media (e.g. websites, curricula, books, etc.) the vision and mission are published and how these are disseminated among stakeholders)

1.1.3. Mention the process for defining Vision and Mission of the department (2)

Deriving department's Vision and Mission which was closely associated with University's Vision and mission, it is the result of close introspection and successive meetings in the department with:

- Faculty Members
- Alumni
- Parents/ Guardians
- Society/Industries
- Employers
- Students

Finally, the members of IQAC (Internal Quality Assurance Cell) and BOM (Board of Management) expressed satisfaction over the Vision and Mission of the Department.

(Articulate the process involved in defining the vision and mission of the department from the vision and mission of the institute.)

1.2. Programme Educational Objectives (15)

1.2.1. Describe the Programme Educational Objectives (PEOs) (2)

A. To enrich the students with state of the art knowledge in the field of Civil Engineering.

B. To keep abreast the students with the use of modern tools, equipments and softwares and inculcating the habit of life-long learning.

C. To foster team work and professional ethics among students towards devising feasible solutions to problems and project work.

(List and articulate the programme educational objectives of the programme under accreditation)

1.2.2. State how and where the PEOs are published and disseminated (2)

The PEO's are published in:

- Departmental Hoarding
- Department's Brochure
- Department's homepage on University's Website
- Various compiled series of documents by department from time to time.

The PEO's were circulated through mails among stakeholders, several sessions of presentation in department, meetings at different forums and massive involvement of teachers with outside world to convey and accomplish the same.

(Describe in which media (e.g. websites, curricula, books, etc.) the PEOs are published and how these are disseminated among stakeholders)

1.2.3. List the stakeholders of the programme (1)

i. Students
ii. Alumni
iii. Parents/ Guardians
iv. Faculty & Staff
v. Society
vi. Employers

(List stakeholders of the programme under consideration for accreditation and articulate their relevance)

1.2.4. State the process for establishing the PEOs (5)

To establish department's PEO's first step was to take feedback and suggestions from several companies frequently visited during campus placements giving employment. Efforts were also made in involving parents and guardian of students for their opinion regarding their expectations.

After receiving the feedback and suggestions meetings with following were held:

i. Alumni
ii. Faculty Members
iii. Departmental Advisory Group
iv. BOS

The members mentioned above, after many deliberations came to the final shape of PEO's of the department.The PEO's were accepted after final consent and recommendations from Members of IQAC and final approval of the BOM.

(Describe the process that periodically documents and demonstrates that the PEOs are based on the needs of the programme's various stakeholders.)

1.2.5. Establish consistency of the PEOs with the Mission of the institute (5)
(Describe how the Programme Educational Objectives are consistent with the Mission of the department.)

PEO's	Mission Of the Institute				
	1	2	3	4	5
A	√	√			√
B				√	√
C	√	√	√	√	√

PEO's	Mission Of the Department			
	I	II	III	IV
A	√	√		
B		√		√
C		√	√	√

1.3. *Achievement of Programme Educational Objectives (30)*
1.3.1. Justify the academic factors involved in achievement of the PEOs (15)

To achieve and analyze PEO's is important because it continuously renders the scope for further enhancement of PEO's with the emerging trends and changes in technical world and society. The factors which contribute to achievement of PEO's are-

i)Curriculum: The structure of curriculum designed for the tenure of undergraduate programme is such that it encompasses all possible domains pertaining to Civil Engineering department for imbibing the core competency and acceptance in field of Civil Engineering.

ii) Tests, Quiz and End Semester Examination: The distribution of marks in terms of Tests, Quiz and End Semester Examination and scoring in the subjects gives a close feedback of the relevance of the PEO's with the programme curriculum. The target set to clear the course emphasizes on the understanding one should gain from the courses

iii) Assignments/Tutorials: Assignments and tutorials are givenin each course to cover the wholesome complexities of the subject.

iv) Laboratories/practicals: The inclusion of labs/practicals along with theory subject is a way to provide coherence towards achievement of PEO's.

v) Seminar: Assigning proper weightage to seminar in curriculum of undergraduate helps in imparting broad knowledge of new research topics and their application in modern day.

vi)Industrial Training: In order to achieve the PEO's an industrial training is mandated in the curriculum so as to imbibe and comprehend the technical changes in the industries/firms.

vii) Project: The completion of project helps in incorporating broad perspective of Civil Engineering.

viii)Invited Talks: People from different industries, firms and institutions are invited for delivering the recent innovations and practices in concerned fields.

ix)Feedback: Time to time feedback from students verbally and through sets of questionnaires helps in reviewing the rate of growth of department.

(Describe the broad curricular components that contribute towards the attainment of the Programme Educational Objectives.)

1.3.2. Explain how administrative system helps in ensuring the achievement of the PEOs (15)

The various bodies responsible for maintaining the coherence in achievement of PEO's are as follows:

i. **Board of Management**
   For the overall administration of the University as per its Act
ii. **Finance Committee**
   For the overall financial administration of the University as per Act
iii. **Academic Council:** It closely monitors and continuously holds discussions with faculty members from time to time in achieving the PEO's. It extends its support for implementation of anything new in the curriculum and puts its efforts towards growth of department.
iv. **Examination Committee:** The committee holds meeting at least twice in a year to discuss and evaluate the quality of Question papers and their relevance to the subject which subsequently helps in the attainment of PEOs.
v. **Internal Quality Assurance Cell (IQAC)**
   For ensuring the quality in teaching learning processes and other related activities
vi. **BOS:** The approval of new structure for curriculum, modifications and improvement is well discussed, reviewed and worked by Board of Studies(BOS) which consists of faculties from departments, experts from various other institutions like IIT's/NIT's, industries, alumnus and other members of the BOS. The time-table as prescribed by the University is strictly followed which ensures timely completion of running programmes within stipulated time.
vii. **Academic Committee:** The proposals approved by BOS are further discussed and reviewed by the academic committee and provides suitable input to the BOS for necessary changes.
viii. **Dean Under Graduate Studies and Entrepreneurship**
   Responsible for all aspects of the academic planning, execution and administration related to academic activities
ix. **Dean Student Affairs**
   To look into all issues related to student welfare and support the students for their holistic development
x. **Dean Planning, Resource Generation and Alumni Relations**
   To advise and devise policies on planning, expansion, diversification of the University activities, preparation and execution of all developmental proposals
xi. **Dean Post Graduate Studies and Research & Development**
   Responsible for the overall research and related development activities in the University
xii. **Controller of Examination**
   To conduct exams, evaluation of answer scripts, preparation/ declaration of result & its analysis, issue of related documents and administering all examination activities.
xiii. **Training & Placement Cell**
   To find various avenues for the placement of the students, arrange finishing schools for the refinement of the students to strengthen the Industry-Academia interaction.

xiv. **Council of Students Activities (CSA)**
To manage extra-curricular activities for the overall development of the students

xv. **Alumni Association**
To strengthen the relationship with the alumni, to act as an interface for getting feedback for strategic decision making and other related issues.

xvi. **Industry-Institute Interaction Cell**
To act as an interface between the University and industries for improving the academic standards and placement opportunities

xvii. **Entrepreneurship Development Cell**
To promote entrepreneurship amongst students and perform other related activities

xviii. **Innovation Cell**
To nurture and support the creativity and innovation related activities amongst the students and other stakeholders

xix. **Proctor**
To ensure the discipline among the students by implementing the rules and regulations framed by the University with the help of proctorial board

xx. **Chief Warden**
To ensure the implementation of policies for smooth functioning of the hostels, messes and other facilities in the hostels

xxi. **Warden**
To look after the basic needs of the hostel residents by providing a safe, hygienic, comfortable, respectful environment for living and learning.

xxii. **Faculty members of the department:** The evaluated answer copies of tests as well as end semester examination are shown to the students and any doubt regarding marks is cleared by the respective teacher thus avoiding any kind of dissatisfaction among students.

In addition, University's Major Committees and Departmental committees also help in achievement of PEO's as each committee's functioning in a way is a step towards achievement of PO's grouped to arrive at PEO's.

S. No.	Committee	Function	Working Process	Regulations
1.	Laboratory Management Committee	1.Maintenance of Lab 2.Development of Lab as per curriculum 3.Conduction of Lab 4.Display Time table and list of equipment and experiments	Every Lab has a laboratory management committee headed by Officer In-charge of the concerned lab, technical supporting staff and non-technical supporting staff. The nominations for all these functionaries are made by Head Of Department.	Ordinances as applicable for the programme.

2.	Time TableCommittee	1.To generate time table for theory and practical' for all classes 2.Based on load distribution prepare time table and display to the students 3. Issue personal time table copies duly signed by OC time table and HOD to all the concern staff.	The Officer In-charge for time table is nominated by the Head of Department who looks after the implementation and facilitate changes as per the need of faculty members.	Ordinances as applicable for the programme.
3.	Students attendance monitoring Committee	1.Maintain daily record of students attendance 2.To display defaulter list before class test and end semester examination	The Officer In-charge for attendance monitoring is nominated by the Head of Department who compiles the attendance and maintains the record.	Ordinances as applicable for the programme.
4.	Parenting and counselingCommittee	1.Counseling of students based on performance, attendance and social issues 2. Parent meeting is arranged	The O/C is nominated by the HOD who is responsible for organizing the Parent- Faculty meet and maintaining the feedback	1.Keep counseling record by parent teachers 2.Parent meeting is arranged at least once in a semester
5.	Exams Committee	1.To display END semester practical, theory time table 2. To conduct class tests 3. Prepare award sheet for practical and Theory exam. 4. Display finalized time table with seating arrangement 5.Smooth conduction of end semester and internal class tests 6. Showing the evaluated answer	The O/C of the committee is nominated by the HOD and supported by several faculty members. They are responsible for the smooth completion of Exam.	Ordinances as applicable for the programme.

		books to the students. Display the marks.		
6.	Project monitoringCommittee	1.Finalization of project groups 2. Allotment of teacher guide. 3. Exam. Conduction.	The In-charge of this committee is nominated by the HOD who ensures that project execution happens smoothly	1.Weekly monitoring of project status. By the concerned guide. 2. End semester examination.
7.	Seminar Monitoring Committee	1.Finalization of seminar groups 2. Discussion on Selection of topics. 3. Discussion on Compilation of Seminar Reports	The committee In-charge is responsible for proper execution of seminar and is nominated by the HOD	1.Weekly presentation and discussions
8.	Industrial Training Monitoring Committee	1. To be in touch with industry experts and invite them for seminars at relevant time. 2. Arrange visit in industries.	The Incharge of the committee is nominated by the HOD and is responsible for arrangement of industrial visits, guest lectures and workshops	1.Ensure attendance of all students for all events 2. Permission from higher authority.
9.	Departmental Wall MagazineCommittee	1.Monthly preparation of a magazine consisting of departmental activities both technical and non-technical 2. Material collection and editing	The Incharge of the committee is nominated by the HOD who looks proper execution of the given work	The committee is regulated by the HOD.
10.	Departmental LibraryCommittee	1. Keeps the record of books issued and returned. 2. Preserves the latest magazines, Journals and books	The committee consists of an Officer In- charge with supporting technical and non-technical staff who keeps the record. All these nominations are made by the HOD.	As per University management system
11.	Innovation Cell	1.To encourage innovative ideas through projects/seminars 2.To organize lectures/workshops pertaining to	The Incharge of the committee is nominated by the HOD.	Ordinances as applicable for the programme.

		recent innovations		
12.	Entrepreneurship Cell	1.Arrange expert lectures of successful entrepreneurs.	The Incharge of the cell is nominated by the HOD and supported by students and faculty members.	As per University management system
13.	Industrial TourCommittee	1.To organize industrial visits 2.To identify the appropriate places/industries for visit.	The In-charge of whole visit is nominated by the HOD and supported by faculty members	Ordinances as applicable for the programme.
14.	Carrier GuidanceCommittee	1.To give proper guidance to the students regarding technical or non-technical issues. 2.To help students in identifying their area of interest and career pertaining to that field.	The Chairman of the committee is nominated	As per University management system
15.	Grievance RedressalCommittee	To look after the grievance arising in the department and do the necessary action.	The committee consists of faculty members and students nominated by the HOD.	As regulations made by the University.
16.	Training and Placement Committee	1.To allocate different firms/organization/ Institutes for summer training. 2.To interact with the different firms/companies for the campus placements.	The Officer In-charge is nominated by the HOD.	As regulations made by the University.
17.	Departmental Advisory Group	To suggest and discuss the changes in technical society and guiding the students on same line.	The group consists of all the faculty members of department and chaired by HOD.	Ordinances as applicable for the programme.
18.	PG Convener	To promote research and development activities in the Department	The Convener is nominated by the HOD.	As applicable for the programme.

19.	Association of Civil Engineers(ACE)	To organize technical and cultural activities	The Secretary is appointed by HOD.	As per the department management system.
20.	Under-Graduate Studies Committee	To held discussion pertaining to structure of curriculum and syllabus and reviewing afterwards if needed	The Convener is nominated by the HOD	As regulations made by the University
21.	General Maintenance Committee	To take suggestions and complaints from students regarding infrastructure and forwarding them for necessary action.	Committee is composed of students and teachers as its members.	As per the regulations of University
22.	Website Administration Committee	To upload all the documents related to department meetings and other necessary information.	Members nominated by the HOD looks after timely uploading of documents and notices	As per the departmental regulations.
23.	Departmental Alumni Committee	To strengthen the contacts with alumni, inviting and taking suggestions from time to time where they play as stakeholders.	The members are nominated by the HOD to strengthen the alumni contacts.	As per the department regulations
24.	Special Lectures Management Committee	To invite experts from various fields for delivering special lectures, keeping pace with recent developments	The members are nominated by HOD to schedule and make arrangements for these lectures.	As per the department regulations.

(Describe the committees and their functions, working process and related regulations.)

1.4. Assessment of the achievement of Programme Educational Objectives (40)

1.4.1. Indicate tools and processes used in assessment of the achievement of the PEOs (25)

Describe the assessment process that periodically documents and demonstrates the degree to which the Programme Educational Objectives are attained. (10)
Include information on: (15)

a) Listing and description of the assessment processes used to gather the data upon which the evaluation of each programme educational objective is based. Examples of data collection processes may include, but are not limited to, employer surveys, graduate surveys, focus groups, industrial advisory committee meetings, or other processes that are relevant and appropriate to the programme;

b) The frequency with which these assessment processes are carried out.

Assessment Tools	Assessment Process	Frequency per year	Percentage of achievement of all PEO's
Examination	Evaluation of answer sheets of end semester examination, along with evaluation done as part of Quizzes, Major and Minor Test, Tutorials, Assignments	1) Twice End-semester Examination 2) 3 Minor Test per semester per subject 3)Quizzes/Assignments/ Tutorials	70%
Feedback of faculty members	Feedback of faculty members is collected as part of University's curriculum and performance appraisal of students in each course	1)Once in a semester	3%
Feedback from students	Students are required to answer set of questions placed in questionnaire through a regular website to assess the momentum and direction of growth on grounds of achievement of PEO's. The analysis of the answers and quantification leads to important decisions for the growth of department and a step ahead to achieve PEO's.	1)Once in a semester	3%
Feedback from alumni	Contributing to nation's growth in terms of qualified graduates and producing a responsible engineer for society, it was hence decided to have frequent sessions in terms of meetings, discussions and personal interaction with the alumni through a regular website	1) Once in a year	3%

GATE Score	Number of students qualified in the exam	1)Once in a year	10%
Placement Record	Number of students placed	1)Once in a year	5%
Feedback from employer	Feedback regarding performance of the student is requested from the corresponding employer on a regular basis through website	1)Once in a year	6%

1.4.2 Provide the evidences for the achievement of the PEOs (15)

a. The expected level of attainment for each of the program educational objectives
b. Summaries of the results of the evaluation processes and an analysis illustrating the extent to which each of the programme educational objectives is being attained; and
c. How the results are documented and maintained.

a) The expected level of attainment for each of the program educational objectives;

The following procedure was adopted for the analysis of PEOs:

1) The courses offered during the entire program i.e. from semester I to semester VII have already been identified based on their percentage contribution towards each Program outcome. These percentages have been identified based on the expected course outcomes and their relevance or co-relation with the corresponding PO.
2) Based on the major contribution of each PO to a particular PEO the POs are identified and grouped for a particular Programme Educational Objectives. In this way the PO can be segregated corresponding to every PEO.
3) Since the analysis for each PO has been computed so to assess the degree of achievement of PEOs has been worked out.

The department in its meetings has already decided the expected level of suchcomputations and the expected level of attainment in the form of percentage of students.

The achievement of the PEO's can be directly inferred from the performances of the passing graduates:

PEO's	Expected level of attainment
A	50%
B	50%
C	80%

b) Summaries of the results of the evaluation processes and an analysis illustrating the extent to which each of the programme educational objectives is being attained;

PEO's	Expected level of attainment (Target)	Level of attainment(Achieved)
A	50%	54.42
B	50%	47.06
C	80%	98.53

In addition, the following parameters can also be included to assess the degree of achievement of PEO's.

i. To look at the performances of the students in correlation to the PEO's articulated where they are subjected to work on live practical problems and motivated to go for further studies and contribute to the field of research and innovation.
ii. To closely assess the achievement of PEO's is to look for : students going for types of job, industries and companies towards which they are inclined and type of work assigned to them in that working setup.
iii. To look for all those who have created new ways to achieve excellence in different fields with true sense of ethics and social responsibility.

c) How the results are documented and maintained.

The process for documentation and maintenance of results is described below:

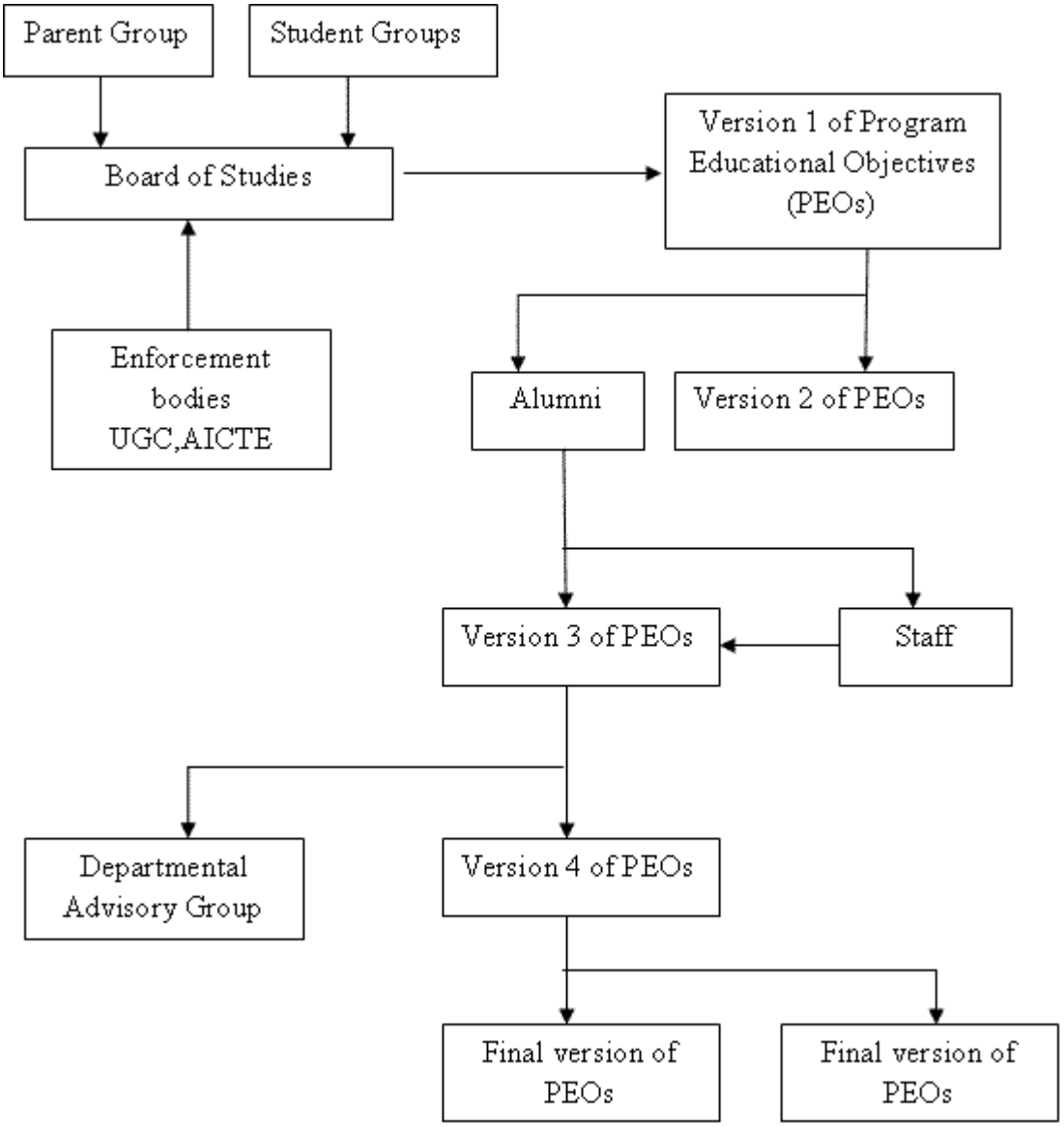
1) The evaluated answer sheets of End semester Examination and all the Minor tests copies are sent to the Examination section with a copy of mark sheets.
2) The marks are uploaded on a common portal with user specific credentials.
3) After the uploading of marks verification of the uploaded marks is done by designated two faculty members from the Department.
4) Further Additional Controller of examination and Controller of examination verifies the same.
5) After the complete verification process final results are generated in Tabular sheets and signed by the representative of the Department and COE and Addl. COE.
6) Then the final results are declared. The soft copy of tabulation sheet is sent to the Head of Department for further analysis and necessary action.

Further the examination section headed by COE and Addl. COE looks after maintenance and documentation of marks for each student.

1.5. Indicate how the PEOs have been redefined in the past (10)

(Articulate with rationale how the results of the evaluation of PEOs have been used to review/redefine the PEOs)

The Program Educational Objectives are evolved through a process of discussion and deliberations chiefly co-ordinated by the Head of Department and all faculty members of the department involving discussions/inputs from the representative groups as shown in the flowchart below


Parent Group
Student Groups
Board of Studies
Version 1 of Program Educational Objectives (PEOs)
Enforcement bodies UGC,AICTE
Alumni
Version 2 of PEOs
Version 3 of PEOs
Staff
Departmental Advisory Group
Version 4 of PEOs
Final version of PEOs
Final version of PEOs

II. Programme Outcomes (225)

2.1. Definition and Validation of Course Outcomes and Programme Outcomes (30)
2.1.1. List the Course Outcomes(COs) and Programme Outcomes (POs) (2)
(List the course outcomes of the courses in programme curriculum and programme outcomes of the programme under accreditation)

The programme outcomes of the department are designed in such a way that student will be able to inculcate following capabilities:

a) Broadening the horizon of the students in the field of Civil Engineering, increasing their ability to apply knowledge of mathematics, science and engineering to solve real world problems.
b) Increasing the ability of students to identify, formulate and solve problems in a systematic way by appropriate collection, analysis, and interpretation of data,
c) Increasing their ability to design a system, component or process to meet the desired needs in an environment friendly and socially acceptable way.
d) Enhancing their skills to analyse complex Civil Engineering problems and obtain the solution by synthesizing simple components
e) Increasing their ability to use the techniques, skills and modern engineering and Information Technology based tools (such as web-based applications and open source software etc.) to increase the creativity of students.
f) Enhancing awareness of students about the impact of engineering projects in a global and societal context (social, economic, legal and/or environmental implications),
g) Enhancing their ability to practice environmental concerns and related sustainable measures and be capable of carrying out environmental impact of a civil engineering project
h) Informing students about engineering ethics and professional responsibilities
i) Increasing their decision-making skills and innovative capability not only individually but also in a multi-disciplinary team.
j) Increasing the ability to communicate effectively by enhancing their drawing and report writing skills and oral presentation skills
k) Increasing awareness of students about cost, time and quality issues in construction helping them to develop social and leadership skills,
l) Providing the students with knowledge on contemporary issues in the field of civil engineering and recognizing the need for an ability to engage in continuous and life-long learning.

List of Course Outcome for B.Tech (Civil)

Course Code	**Course Title**	Course Outcomes
First Semester		
BAS-01	Engineering Mathematics	1. Use of various mathematical techniques such as differential operators, matrix algebra and vector differentiation and integration for solving their realistic engineering problems. 2. To constructs arguments to prove and justify their realistic results.

		3. Model a physical situation using mathematical terms
BAS-02	Engineering Physics	1. Frames of reference 2. Postulates of special theory of relativity 3. Consequences of Lorentz transformation Equations 4. Application of mass energy equivalence principle for real problems 5. Identification of particle problems in view of statistical Mechanics 6. Classical Statistics, Bose Einstein Statistics 7. Application of Classical Statistics, Bose Einstein Statistics to Black body radiation, distribution law of energy, Planck's radiation formula and Stefan's law. 8. Fermi – Dirac statistics 9. Application to electrons in metals 10. Wave particle duality 11. Uncertainty principle and its application 12. Schrodinger wave equation 13. Application of Schrodinger wave equation to Particle in a box and Simple harmonic oscillator 14. General theory of image formation 15. Cardinal points of an optical system 16. Need for a multiple lens eyepiece 17. Common type of eyepieces and their applications 18. Interference of light 19. Interference of light due to division of wave front and amplitude 20. Use of Fresnel's Biprism and Newton's ring for the determination of wave length of light 21. Single, double and N- Slit Diffraction 22. Diffraction grating, and its application in the analysis of light spectra 23. Rayleigh's criterion and resolving power of grating 24. Phenomena of double refraction 25. Production and analysis of plane, circular and elliptical polarized light 26. Application of Polarimeter to determine the specific rotation of cane sugar solution 27. Spontaneous and stimulated emission of radiation 28. Essentials of Laser action 29. optical fibers 30. Propagation mechanism of optical signals in optical fibers 31. Basic parameters of optical fibers 32. Types of optical fibers 33. Attenuation and losses in optical fibers 34. Principle of Holography 35. Construction and reconstruction of Image on

		hologram 36. Applications of holography 37. Analyze real problem of engineering 38. Application of the principles of physics 39. Solution of problems with group activities
BCE-01	Mechanics of Structures	1. Able to understand how to compute the force, magnitude and direction. 2. Develop the ability to analyze forces in mechanics of structure in project and feasibility of project throuts their life cycle. 3. Students will be able to know the different types of forces, dynamic and kinematic in projects. 4. Students will be able to know compute and control various types of forces in mechanics of structure aspects and its provision. 5. Students studying this method, find it difficult to cope up with subject like, strength of materials, structural analysis, structural design, and machine design.
BCS-01	Introduction to Computer Programming	1. Understand the basic terminology used in computer programming 2. Write, compile and debug programs in C language. 3. Use different data types in a computer program. 4. Design programs involving decision structures, loops and functions. 5. Explain the difference between call by value and call by reference 6. Understand the dynamics of memory by the use of pointers
BAS-03	Professional Communication	1. Use of various facets of communication skills, such as, Reading ,Writing ,Listening and Speaking skills. 2. To identify, formulate and solve the real life problems with positive attitude. 3. To inculcate the habit of learning and developing the communication and soft skills by practice.
BCE-10	Engineering Graphics	1. How Engineering Drawing helps to sketch the imagination? 2. Able to effectively practice the different scales for drawings. 3. Effectively analyze the geometrical shapes and to be able to draw. 4. About solids and discuss about their

		classification. 5. How toimplement the different views for a solid placed in 3d space. 6. Construction of the object from different perspective. 7. Comparison and contrast between frustum and truncated solid. 8. Sketching of different sections for any 3d regular object. 9. Discussing the principles of Isometric Projection. 10. Sketching isometric projections for different geometrical shapes and solids.

Course Code	**Course Title**	Course Outcomes
Second Semester		
BAS-07	Engineering Mathematics II	1. Solving their realistic engineering problems by understanding of ordinary differential equation, Laplace transforms, Fourier series and partial differential equation. 2. To constructs arguments to prove and justify their realistic results. 3. Model a physical situation using mathematical terms. 4. To develop the habit of mathematical skill and lifelong learning.
BAS-08	Engineering Physics-II	1. Basics of crystallography application in Engineering 2. Use of the principles of sound wave and acoustics in civil engineering with the consideration of NDT. 3. Basic principles of electricity and magnetism applied in Engineering. 4. Maxwell's equation of electromagnetic theory and its application in engineering. 5. Basic principles of Semestericonducting materials and its application.
BAS-09	Engineering Chemistry	1. Students will acquire basic knowledge in Engineering Chemistry, which allows students to gain qualitative and quantitative skills. 2. Make good scientific observations and develop experimental method of evaluation of different systems at industrial or research level. 3. Students will develop Interdisciplinary skills which can help them to thrive in the life-long changing environment in various fields of Industry. 4. Students will acquire practical knowledge and will be able to analyze data constructively and

		formulate new ideas
BEE-01	Principles of Electrical Engineering	1. Identity, formulate, and solve problems using advanced engineering principles, methodologies and tools 2. Design, implement, validate and deploy a component, device, system, or process to meet desired needs within realistic constraints 3. Understand the impact of engineering solutions in a global, economic, environmental, societal and ethical context, including political, health, safety, manufacturability, and sustainability 4. Understand contemporary issues in electrical engineering practice 5. Communicate professionally and effectively
BAS-12	Industrial Psychology	1. Use of various facets of psychology ,it problems and understanding. 2. To identify, formulate and solve the real life problems with positive attitude. 3. To inculcate the habit of learning and developing the industrial problems from psychological eyes
BME-10	Workshop Technology	1. The importance and applications of workshop. 2. The knowledge of machining process and will developskills for producing products using this process in the carpentry, fitting and machine shop. 3. The knowledge of forming process and will develop skills for producing products using this process in the Black smithy and Sheet metal shop. 4. The knowledge of casting process and will develop skills for producing products using this process in the Foundry shop. 5. The knowledge of welding process and will develop skills for producing products using this process in the welding shop.
BEC-01	Fundamentals of Electronics Engineering	1. Characterize semiconductors, diodes, transistors and operational amplifiers. 2. Design simple analog circuits 3. Design simple combinational and sequential logic circuits 4. Understand functions of digital multimeter, cathode ray oscilloscope and transducers in 5. the measurement of physical variables

		6. Understand fundamental principles of radio communication

Course Code	**Course Title**	Course Outcomes
Third Semester		
BAS-21	Engineering Mathematics-III	1. Use of various mathematical and statistical techniques such as complex integration for evaluation of definite integrals, correlation and regression, interpolation, numerical integration and numerical solution of ordinary differential equation. 2. To identify, formulate and solve real life problems. 3. To inculcate the habit of mathematical thinking and lifelong learning
BCE-11	Concrete & Concrete Structures	1. Concrete technology. 2. Working stress design methed of concrete structure. 3. Limit State design method of concrete structure. 4. Design of singly, doubly reinforced beam by above two methods. 5. Design of one way and two way slabs.
BCE-12	Basic Surveying	1. By collecting data with errors, students gain a better appreciation of data quality and how instruments and field techniques contribute to error. 2. Students learn rules for handling systematic errors, random errors and blunders. 3. Students learn elementary statistical methods to aid in error control. 4. Students appreciate the concepts of accuracy and precision. 5. Students understand how to meet client expectations in terms of data quality. 6. Students develop an appreciation of how one set of surveying data relates to another. 7. Students learn the importance of referencing their projects properly. 8. Students learn to work with others, respect the contributions of others, resolve difficulties, and understand responsibility. 9. Students will learn surveying techniques that will remain current for long periods of time. 10. Students understand the range of calculations that can be made with surveying data and understand the linkages between surveying data and engineering design. 11. Students learn how surveying data may be stored

		and retrieved for a variety of purposes. 12. Students develop proficiency in working with raw data. Students see applications of their previous education in mathematics. 13. Students understand the range of surveying instrumentation and the appropriate uses of each class of instrument. 14. Students learn how surveying data is clearly and ethically reported
BCE-13	Fluid Mechanics	1. Understand how make measurements of flow. 2. Understand the type and nature of flow. 3. Be able to explain several important principles. 4. Explain and describe the difference between smooth and rough surface. 5. Develop the skills in analyzing the problems.
BCE-14	Structural Mechanics-I	1. Students learn different methods for how calculate the stress strain. 2. Students learn to establish the relation b/w different modulus of elasticity of different materials. 3. Students learn how to apply hooks law, and how draw the mohr's cycle for calculating the stress. 4. Students learn different types of load , beams, structures, reactions, types of structures. 5. Students understand how to calculate the reactions , calculation of bending moment and shear force, and how to draw the bending moment and shear force diagram for different type of structures. 6. Students learn about the columns and how buckling is occurred in columns due to loading. 7. Students learn how analyzes the different type of structures for different methods. 8. Students learn the how failure is occurred in the structures.
BCE-15	Engineering Geology & Building Materials	1. A clear understanding of rocks and their minerals 2. A clear understanding of properties of building materials like cement, aggregates, concrete,lime and bricks. 3. Be able to perform several experiments to find out consistency, initial and final setting time of cement, workability of concrete, crushing strength of aggregates etc.
BAS-22	Nano	1. Use knowledge of nano science and

	Technology	mathematics to Compile and analyze data and draw conclusions at the nano level.

Course Code	**Course Title**	Course Outcomes
Forth Semester		
BAS-24	Applied Computational Methods	1 To be familiar with the software package Mathematica and learn how to solve mathematical problems with it. 2 To use the software for teaching mathematics at various educational levels. 3 To study linear and nonlinear problems and to solve them computationally. 4 To use methods of Fourier series and then numerical methods for solving ordinary differential equations. 5 To use methods of dimensional analysis and perturbation theory using computer packages. 6 To be able to use methods from calculus of variations by solving problems for extremums of functionals.
MBA-01	Industrial Management	1. Pursue professional positions in industry and/or graduate study programs in their areas of interest. 2. Contribute to the body of knowledge in their professional discipline through problem-solving, discovery, leadership, and responsible application of technology. 3. Continue to develop both professionally and personally through activities such as participation in professional societies, continuing education, and community service.
BCE-16	Hydraulic and Hydraulic machines	1. Understand how to make measurements of flow 2. Understand the type and nature of flow. 3. Be able to explain several important principles of machines. 4. Develop a knowledge and understanding of more advanced aspects of hydraulics and hydraulics machines. 5. Explain and describe centrifugal and mixed flow pumps 6. Explain and describe different types of turbines 7. Be able to explain several important principles of hydraulics and hydraulics machines. 8. Know what are the questions that can answer regarding the subject. 9. Develop some skills in analyzing the problems. 10. Designing the hydraulic structures like spillway, barrage.

BCE-17	Structural Mechanics-II	1. To analyse indeterminate structures by using different compatibility equations used in various methods. 2. To analyse the shear force , Thrust and bending moment acting on two hinged arches. 3. To draw the influence line diagram for moving or rolling loads so as to determine maximum bending moment, shear force etc. 4. To find out the forces acting on two hinged and three hinged stiffening girders. 5. To draw the Influence line diagram for maximum bending moment and shear forces for stiffening girders. 6. To formulate matrices for computation of unknown member forces in high degree indeterminate structures. 7. To do the plastic analysis of the structures so as to use its ultimate strength. 8. To determine the collapse load of different structures.
BCE-18	Advanced Surveying	1. Students learn the method of triangulation and are able to demonstrate the working of Total Station 2. Students learn the importance of precision and accuracy in taking observations. 3. Students learn the different types of curves and methods to set them out. 4. Students learn the fundamental of photo interpretation
BCE-19	Building Construction & Planning Estimation and Costing	1. Identify quantities of the various materials involved in the project. 2. Create summaries and detailed quantity surveying reports quickly and easily. 3. Count and quantify all of your project design data more quickly and easily. 4. Generate quantities linked to specific objects. 5. Perform interactive examination of 3D models for material cost estimating purposes. 6. Compile, update, and interact with quantity-related project data.
BAS-20	Communication Skills	1. Use theories of interpersonal communication to explain and evaluate their own behavior in interpersonal relationships. 2. Synthesize and apply appropriate and effective conflict management strategies.

Course Code	Course Title	Course Outcomes
Fifth Semester		
EHU-501	Engineering & Managerial Economics	1. Be able to perform and evaluate present worth, future worth and annual worth analysis on one or more economic alternatives. 2. Be able to perform and evaluate payback period and capitalized cost on one or more economic alternatives. 3. Be able to carry out and evaluate benefit/cost, Life cycle and Breakeven analysis on one or more economic alternatives.
ECE-501	Geotechnical Engg	1. Describe the fundamental differences in engineering behavior between cohesive and cohesionless soils. 2. Compute the groundwater seepage and distribution of groundwater pressure. 3. Compute the applied stress beneath the ground surface. 4. Demonstrate that you know the fundamental difference in the strength and deformation characteristics of cohesive and cohesionless soils. 5. Analyze field and laboratory data to determine the strength and deformation properties of cohesive and cohesionless soils. 6. Compute settlements due to consolidation of soil 7. Prepare soil investigation report based on the result of various field tests. 8. Design a shallow foundation.
ECE-504	Structural Analysis-2	1. To analyse indeterminate structures by using different compatibility equations used in various methods. 2. To analyse the shear force , Thrust and bending moment acting on two hinged arches. 3. To draw the influence line diagram for moving or rolling loads so as to determine maximum bending moment, shear force etc. 4. To find out the forces acting on two hinged and three hinged stiffening girders. 5. To draw the Influence line diagram for maximum bending moment and shear forces for stiffening girders. 6. To formulate matrices for computation of unknown member forces in high degree indeterminate structures. 7. To do the plastic analysis of the structures so as

		to use its ultimate strength. 8. To determine the collapse load of different structures.
ECE-505	Design of Concrete Structures-1	1. Understand the concrete making materials and their properties. 2. Understand the basis of proportioning of concrete. 3. Understand various philosophies for design of reinforced concrete. 4. Analyze singly and doubly reinforced concrete rectangular sections . 5. Find moment of resistance of singly and doubly reinforced rectangular sections by working stress method 6. Understand Limit state method of design 7. Apply the concept of limit state method of design for rectangular and flanged sections. 8. Understand the behavior of rectangular sections under shear. 9. Understand the behavior of beams with and without shear reinforcement 10. Understand bond between steel and concrete and derive expression for development length of bar in flexure and anchorage. 11. To understand failure of beam under shear and the concept of equivalent shear. 12. To understand failure of beam under shear and bending moment. 13. To understand concept of equivalent shear and Bending Moment 14. Design a real life problem limit state method (beam). 15. Understand the concept of one way and two way slab. 16. Understand the provisions of IS456:2000 for design of one way and two way slab. 17. Design one way and two way slab by limit state method. 18. Understand the behavior of R.C.C. column and various types of end connections. 19. Understand the provisions of IS456:2000 for design of R.C.C. Columns with and without eccentricity. 20. Can use Design Chart for design of columns subjected to uni-axial biaxial bending.
ECE-502	Transportation Engg-1	1. Types of pavements and their components. 2. Materials used for highway construction. 3. Methods of design of flexible and rigid pavement including IRC method. 4. Construction and maintenance of different types of pavements

ECE-503	Environmental Engg-1	1. Discuss water demand, sources of water and intake structures. 2. Understand transmission of water. 3. Discuss various types of conduits, laying and testing of water supply pipe lines and related issues. 4. Describe storage and distribution of water, design of water distribution system and plumbing systems in buildings.. 5. Describe systems of sanitation and waste water collection. 6. Estimate waste water flows and variations. 7. Design sewers. 8. Discuss types, materials and construction of sewers. 9. Explain the concept of shall bore sewer systems. 10. Do planning of sewerage systems.
ECE-551	Geotechnical Engg. Lab	1. Ability to classify soils with a view toward assessing the suitability of a given soil for use in a designed, constructed facility e.g. foundation, embankment, or highway 2. Ability to evaluate compaction characteristics and interpret field compaction resultswith respect to compaction specifications 3. Ability to apply engineering science principles, using shear strength and compressibility parameters, to analyze the response of soil under external loading. 4. Ability to obtain in-situ soil properties required for many design applications.
ECE-552	Transportation Lab	1. The students will be able to test highway materials like aggregate and bitumen and can take appropriate conclusion. 2. Understand the mix design concept for bitumen's. 3. Students will be able to undertake traffic studies 4. Apply the concept of properties of materials for design of roads.
ECE-553	CAD Lab-1	1. Use of the fundamental features of AutoCAD. 2. Navigate the AutoCAD user interface. 3. Use the precision drafting tools in to develop accurate technical drawings. 4. Drawings in a detailed and visually impressive manner.
ECE-554	Quantity	1. The students will be able to compute project cost

	Estimation & Survey	material, rate analysis etc. 2. Understand the different types of estimation rate analysis to be used in the construction project. 3. Students will be able to undertake Quantity surveying studies.

Course Code	**Course Title**	Course Outcomes
Sixth Semester		
EHU-601	Industrial Management	1. Pursue professional positions in industry and/or graduate study programs in their areas of interest. 2. Contribute to the body of knowledge in their professional discipline through problem-solving, discovery, leadership, and responsible application of technology. 3. Continue to develop both professionally and personally through activities such as participation in professional societies, continuing education, and community service
ECE-602	Environmental Engg.-2	1. Discuss beneficial uses of water, quality requirements and standards. 2. Understand water borne diseases and their prevention and control. 3. Discuss objectives of water and waste water treatment, unit operations and processes and flow sheets. 4. Understand settling phenomena, coagulation and flocculation. 5. Design primary and secondary settling tanks, flocculators and clariflocculators. 6. Understand theory of filtration and various types of filters, disinfection process and water softening along with dosing requirements. 7. Understand preliminary, primary, secondary and tertiary treatment of waste water. 8. Design primary and secondary waste water treatment processes. 9. Discuss anaerobic digestion of sludge and the basic concept of emerging technologies for waste water treatment.
ECE-011	Advanced Foundation Design	1. Ability to evaluate stress distribution below a loaded area. 2. Ability to to determine the bearing capacity of various foundations. 3. Ability to apply engineering science principles, using shear strength and compressibility parameters, to design foundation in expansive soils.. 4. Ability to evaluate consolidation properties of

		soils and apply those properties to settlement problems frequently encountered in civil engineering 5. Gain a broad understanding of vibration due to dynamic loading..
ECE-024	Rural Water Supply and Sanitation	1. Summarize the various problems in terms of water supply and sanitation in rural areas. 2. Interpret the reasons for failure and success of various government policies. 3. Calculate and estimate the water demand for regions. 4. Proposing changes in existing methods for rural water supply. 5. Select the proper water treatment methods for surface water. 6. Designing water distribution network for rural areas. 7. Explain the various structures constructed to stop open defecation 8. Designing waste water collection system for rural areas. 9. Estimation of waste generation and designing units for disposal. 10. Proposing various model for imparting behavioral change in practices followed by rural people
ECE-601	Design of Concrete Structures-2	1. Use and apply design codes. 2. Understand design loads for strength and serviceability and their importance in limit state design. 3. Explain the nature of concrete and steel and how they work as composites. 4. Design reinforced concrete members and structures. 5. Design Prestress members and structures.
ECE-603	Transportation Engg.-2	1. Understand the knowledge of various systems of railway, airport and water transportation. 2. Understand the design concept of railway track, runway, taxiway etc. 3. Apply the concept of geometric design of railway, runway, taxiway etc. 4. Apply the knowledge of various signaling system for railway engineering, air traffic control, navigational aids, etc.
ECE-653	Cad Lab-2	1. Plan, Schedule and Cost the Project Calculate Earned Value Generate Reports. 2. Water CAD analysis output are : the flow for each pipe in the network and the velocities, the pressure for each node and the total head, the

		head loss in each pipe and more of hydraulic output analysis. 3. Also provide the basic guidelines to create a simple map (layout in Arc GIS terms) of Travis County using standard cartographic components
ECE-652	Environmental Engg. Lab	1. Understand the determination of some important water and waste water characteristics in laboratory. 2. Understand the measurement of air pollutants in ambient air. 3. Know the measurement of sound pressure level with sound level water and its applications.
ECE-651	Structural Detailing Lab	1. How to design the concrete structures. 2. What is the maximum and minimum reinforcement in beam? 3. What is the horizontal and vertical spacing between bars? 4. How to design column.
ECE-654	Survey Camp	1. Be able to conduct topographical survey of a given area. 2. Be able to prepare topographical maps of an area. 3. Knowledge of practical implementation of different survey works.

Course Code	**Course Title**	Course Outcomes
Seventh Semester		
EOE-071	Entrepreneurship Development	1. Conceptualize, perceive, start and develop projects 2. Understand analytical tools, principles and concepts of project identification, appraisal, implementation and review 3. Equip students with skills necessary to identify the needs of a particular area and to develop projects to meet these needs 4. Provide sufficient knowledge to implement projects effectively according to plans 5. Provide skills and knowledge in monitoring and evaluating the performance and impact of development projects
ECE-034	Ind.Pollution Control &Env.Audit	1. Discuss about various types of waste and their origin from different industries. (Understanding)

		2. Explain the various control and abatement techniques for control of pollution. (Analyzing) 3. Illustrate the various types of pollutants released by different industries. (Applying) 4. Categorize various control and abatement techniques for handling industrial waste.(Analyzing) 5. Defend the concept of zero discharge effluent from industries. (Evaluating) 6. Identify the types of industries as sources of harmful gaseous emissions.(Analyzing) 7. Recommend the control and abatement technology for harmful emissions from industries.(Evaluating) 8. Discuss about the solid waste generation from industries. (Evaluating) 9. Figure out the life cycle analysis for any by-product of specific industry. (Evaluating) 10. Differentiate between environmental audit and accounts credit. (Analyzing)
ECE-043	Open Channel Flow	1. To explain the terms of the open channel flow equations and explain the interaction among the terms. 2. To develop the open channel flow equations from the basic conservation equations. 3. To solve open channel flow problems through the selection and use of appropriate equations. 4. To explain the physical mechanisms and mathematical relation ships for hydraulic jumps, surges, and critical, uniform, and gradually-varying flows as well as spatially varied flow. 5. Analysis and design of open channel controls, upstream and downstream controls, & spatially varied flow. 6. Analysis and design of open channel transition, functions, and energy dissipaters 7. Ability to design culverts etc. 8. Present a technical concept both written and orally.
ECE-701	Design of Steel Structures	1. General Considerations such as loads, design philosophies etc. 2. Connections in Steel Structures such as Riveted, Bolted, Pinned, and Welded connections. 3. Different types of members such as tension and compression.

		4. Design of beams and their special cases such as Lintels, Purlins. 5. Recognize and account for different instability phenomena that might govern the load carrying capacity of steel elements. 6. Perform design of steel members and connections.
ECE-702	Water Resources Engg.	1. Design of water management systems utilizing the basic principles of the hydrologic cycle. 2. Apply knowledge for efficient design methods for rapid conveyance of water with lesser loss in irrigation canals. 3. To demonstrate a knowledge of the multi-disciplinary nature of water resources engineering. 4. Realize the importance of optimal water use for growing the crops, and apply methods for saving land from water-logging. 5. To demonstrate technique involved in making design problems of canal and related structures to be safe and cost effective. 6. Apply the knowledge in the design of hydraulic structures to be constructed for conveyance of irrigation water. 7. Apply the silt control devices in canals and natural channels for long life of irrigation schemes. 8. Formulate irrigation networks across the country to make itself self reliant in food grain production. 9. Enumerate the need of water resource conservation and management to overcome the natural calamities such as drought and flood and its protection measures.
ECE-751	Seminar	1. Basics and principals of value management 2. Characteristics and components of Emotional Intelligence(EI) 3. Improvement of your own EI 4. Control and management of your emotions and emotions of others 5. Motivation and implementation of values into your company 6. How to unite employees and management of your company 7. How to build and support great and valuable talent. 8. Using art and music in your company 9. Use discussion and the process of writing to

		enhance intellectual discovery and unravel complexities of thought.
ECE-752	Industrial Training	1. Understand the fundamental concepts of civil engineering, its necessity and importance. 2. Apply the knowledge in selecting suitable materials, and construction technique required for a particular 3. construction activity. 4. Understand the significance of various suitable tools and plants to be used as per the given site conditions. 5. Execute and handle the projects individually and on team basis. 6. Manage the various activities of a construction project
ECE-753	Project	1. To develop basic concept and principle of real life problems in Civil engineering 2. Understand the behaviour of simple and comples problems related with Civil Engineering. 3. Recognize and be able to apply fundamental principles to check the accuracy , safety and reliability. 4. Generate an ability to apply knowledge of Civil Engineering in the design of real life Civil engineering problems. 5. Built the necessary theoretical background for planning and estimation of different designed civil engineering structures.

Course Code	**Course Title**	Course Outcomes
Eighth Semester		
EOE-075	Solid Waste Management	1. Illustrate the waste generation in a technological society and analyze the waste generation trends. (Applying and analyzing) 2. Discuss the essential elements for solid waste management. (Understanding) 3. Propose a mathematical approach for handling waste on-site and off-site.(Creating) 4. Calculate the efficiencies of each collection system. (Evaluating) 5. Measure the actual volume of waste produced and reduced in terms of volume estimation.(Evaluating) 6. Calculate the actual amount of energy that can be recovered from waste.(Evaluating) 7. Designing an engineered landfill for waste

		produced from society. (Creating) 8. Illustrate the chemical processes involved during degradation of waste in landfill. (Applying) 9. Categorizing the various design parameters to be fulfilled while adopting composting process for waste treatment. (Analyzing)
ECE-052	Analysis and Design of Hydraulic Structures	1. Use and integrate the fundamental and basic studied towards the goal of selecting,analysing and designing of hydraulic structures. 2. Cope with decision making and satisfy competing objectives. 3. Design,analyse and proof that the hydraulic structures is safe and economical. 4. Work in team and learn successful group interaction for a project. 5. Deliver an oral presentation for the project. 6. Perform studies of various hydraulic structures such as weir/barrages and bross-drainage works. 7. Classify the dams and spillways and know the functioning of each type. 8. Design stilling basin and identify the required type of energy dissipater.
ECE-062	River Engineering	1. To classify the type of rivers and its mechanics. 2. To realize the different river channel pattern and form. 3. To recognise the different river restoration structure, socio-cultural influences and ethics of river restoration. 4. To apply bio-engineering in river engineering. 5. An ability to design the river training structures as per area specific requirements.
ECE-801	Construction Technology & Management	1. Able to understand how to control project schedule, cost, quality and risk. 2. Develop the ability to analyze the risk and feasibility of real state projects throughout their life cycle. 3. Students will be able to know the different types of equipments to be used in the construction projects. 4. Students will be able to know the different types of contracts in construction arbitration and legal aspects and its provision. 5. Students will be able to know various construction Equipments.

ECE-753	Project	1. To develop basic concept and principle of real life problems in Civil engineering 2. Understand the behaviour of simple and comples problems related with Civil Engineering. 3. Recognize and be able to apply fundamental principles to check the accuracy , safety and reliability. 4. Generate an ability to apply knowledge of Civil Engineering in the design of real life Civil engineering problems. 5. Built the necessary theoretical background for planning and estimation of different designed civil engineering structures.

2.1.2. State how and where the POs are published and disseminated (3)
(Describe in which media (e.g. websites, curricula, books, etc.) the POs are published and how these are disseminated among stakeholders)

The POs of the Civil Engineering department are published in:

- Department's notice boards
- Department's Brochure
- Department's syllabus book
- Department's Wall Magazine " SHILP SANDESH"
- University's Website

The PO's of the department are disseminated among alumni through meetings included in the Alumni Meet, through website and brochure and widely discussed by teachers with the students and parents in Faculty-Parent Interaction Meet.

2.1.3. Indicate processes employed for defining of the POs (5)
(Describe the process that periodically documents and demonstrates that the POs are defined in alignment with the graduate attributes prescribed by the NBA.)

The continuous efforts to design and implement POs in coherence with graduate attributes is monitored by:

i. Meetings among faculty members to discuss about the PO's in lieu of new techniques, design, methodologies etc. encountered during consultancy and research projects.

ii. **Meetings in Board of Studies (BOS)** which monitors and approves changes in curriculum and also helps to continuously imbibe new changes based on need by industry. As the experts are from various/different setups it provides more exposure towards the contemporary state of knowledge in field of Civil Engineering.

iii. **Departmental Advisory Group:** The group is composed of faculty members of the department and industry people who are in continuous contact with each other and their combined efforts helps in designing and periodic documentation of Pos and their coherent application.

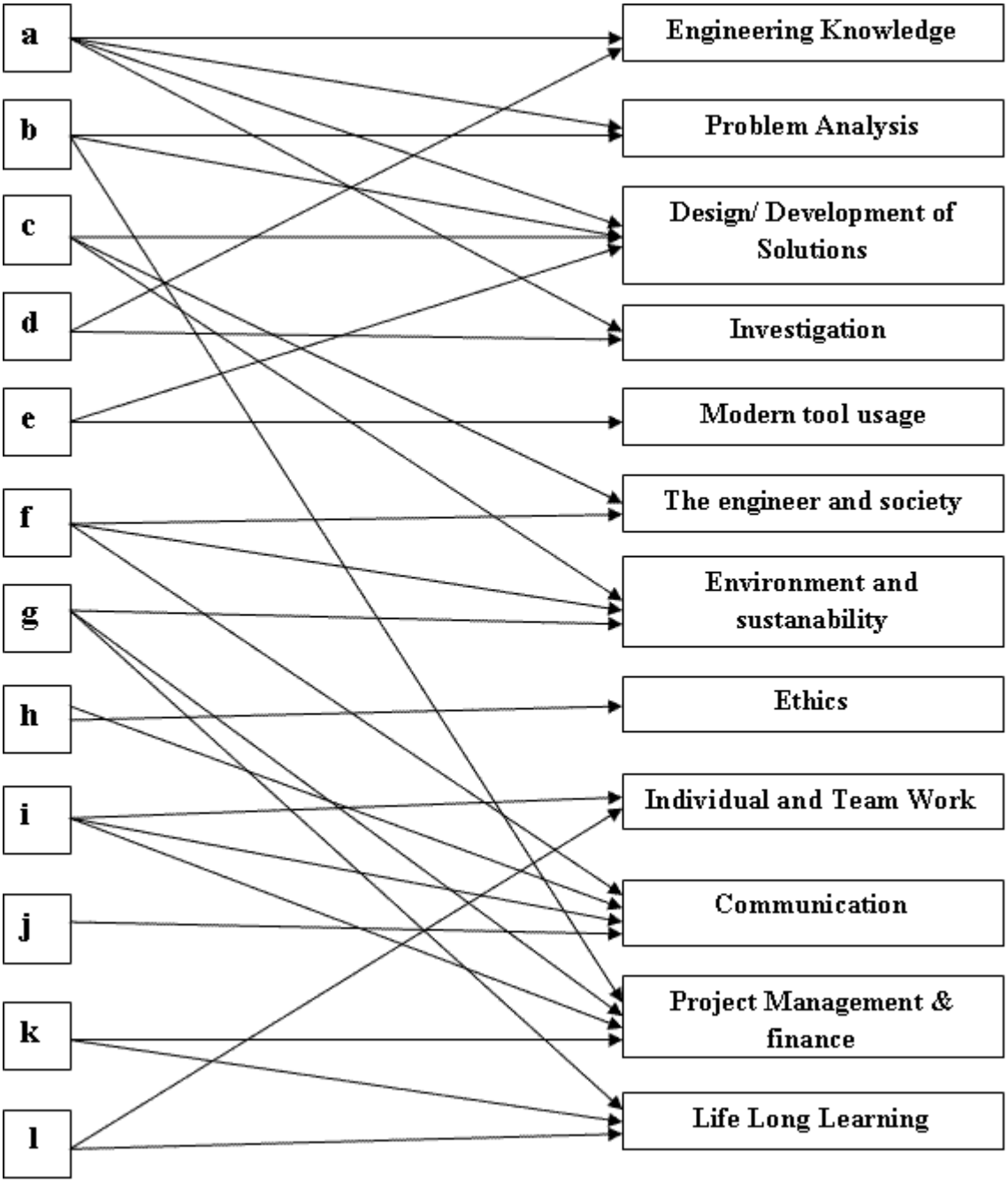
iv. **BOM:** Meetings in Board of Management are held to approve and suggest the necessary changes for attainment of POs.

2.1.4. Indicate how the defined POs are aligned to the Graduate Attributes prescribed by the NBA (10)

(Indicate how the POs defined for the programme are aligned with the Graduate Attributes of NBA as articulated in accreditation manual.)

The programme outcomes of the department are designed in such a way that student will be able to inculcate following capabilities:

a. Broadening the horizon of the students in the field of Civil Engineering, increasing their ability to apply knowledge of mathematics, science and engineering to solve real world problems.
b. Increasing the ability of students to identify, formulate and solve problems in a systematic way by appropriate collection, analysis, and interpretation of data,
c. Increasing their ability to design a system, component or process to meet the desired needs in an environment friendly and socially acceptable way.
d. Enhancing their skills to analyze complex Civil Engineering problems and obtain the solution by synthesizing simple components
e. Increasing their ability to use the techniques, skills and modern engineering and Information Technology based tools (such as web-based applications and open source software etc.) to increase the creativity of students.
f. Enhancing awareness of students about the impact of engineering projects in a global and societal context (social, economic, legal and/or environmental implications),
g. Enhancing their ability to practice environmental concerns and related sustainable measures and be capable of carrying out environmental impact of a civil engineering project
h. Informing students about engineering ethics and professional responsibilities
i. Increasing their decision-making skills and innovative capability not only individually but also in a multi-disciplinary team.
j. Increasing the ability to communicate effectively by enhancing their drawing and report writing skills and oral presentation skills
k. Increasing awareness of students about cost, time and quality issues in construction helping them to develop social and leadership skills,
l. Providing the students with knowledge on contemporary issues in the field of civil engineering and recognizing the need for an ability to engage in continuous and life-long learning.



The figure shows the projected approach of department's PO's towards the attainment of Graduate Attributes.

2.1.5. Establish the correlation between the POs and the PEOs (10)

(Explain how the defined POs of the program correlate with the PEOs)

PEO's↓ / PO's→	a	b	c	d	e	f	g	h	i	j	k	l
A	20	30		25		10				5		10
B			10		30				10		10	
C						10	20	40	30			

2.2.Attainment of Programme Outcomes (40)

2.2.1. Illustrate how course outcomes contribute to the POs (10)

(Provide the correlation between the course outcomes and the programme outcomes. The strength of the correlation may also be indicated)

Course Code	**Course Title**	Mapping with Program Outcomes											
First Semester		a	b	c	d	e	f	g	h	i	j	k	l
BAS-01	Engineering Mathematics-I	30	50		20								
BAS-02	Engineering Physics-I	50	35	15									
BCE-01	Mechanics of Structures			60	25	15							
BCS-01	Introduction to Computer Programming		25			60		15					
BAS-03	Professional Communication								50	20	30		
BCE-10	Engineering Graphics		20	10				20			50		
BAS-05	Environment & Ecology			20			30	50					

Course Code	**Course Title**	Mapping with Program Outcomes											
Second Semester		a	b	c	d	e	f	g	h	i	j	k	l
BAS-07	Engineering Mathematics II	30	50		20								
BAS-08	Engineering Physics-II	50	35	15									
BAS-09	Engineering Chemistry	40		30				30					
BEE-01	Principles of Electrical Engineering			40						35			25
BAS-**	Humanities & Social science Electives	40					30	30					
BME-10	Workshop Technology				35	25							40
BEC-01	Fundamentals of Electronics Engineering	30	30			30						10	

Course Code	**Course Title**	Mapping with Program Outcomes											
Third Semester		a	b	c	d	e	f	g	h	i	j	k	l
BAS-07	Engineering Mathematics-III	30	50		20								

BCE-11	Concrete & Concrete Structures			20	50							20	
BCE-12	Basic Surveying	50				30						20	
BCE-13	Fluid Mechanics	50				50							
BCE-14	Structural Mechanics-I	40				40		20					
BCE-15	Engineering Geology & Building Materials				40	40							20
BAS-22	Nano Technology					50				30			20

Course Code	**Course Title**	Mapping with Program Outcomes											
Forth Semester		a	b	c	d	e	f	g	h	i	j	k	l
BAS-24	Applied Computational Methods	40	40			20							
MBA-01	Industrial Management								50	30		20	
BCE-16	Hydraulic and Hydraulic machines	40	20			40							
BCE-17	Structural Mechanics-II	20				40		30			10		
BCE-18	Advanced Surveying	50				30						20	
BCE-19	Building Construction & Planning Estimation and Costing					20	20		20			40	
BAS-20	Communication Skills								20	40	40		
Course Code	**Course Title**	Mapping with Program Outcomes											
Fifth Semester		a	b	c	d	e	f	g	h	i	j	k	l
EHU-501	Engineering & Managerial Economics						50		30	20			
ECE-501	Geotechnical Engg	50				25							25
ECE-504	Structural Analysis-2	30				40		30					
ECE-505	Design of concrete structures-2	20			30						10		40

ECE-502	Transportation Engg-1	40	25	25					10				
ECE-503	Environmental Engg-1	50		20		20		10					
ECE-551	Geotechnical Engg. Lab	50			30	20							
ECE-552	Transportation Lab	40			20								40
ECE-553	Cad Lab-1					50				20	30		
ECE-554	Quantity Estimation & Survey	40	30	20	10								

Course Code	**Course Title**	Mapping with Program Outcomes											
Sixth Semester		a	b	c	d	e	f	g	h	i	j	k	l
EHU-601	Industrial Management		30							30		40	
ECE-602	Environmental Engg.-2	30							20			40	
ECE-011	Advanced Foundation Design	30	20	20		30							
ECE-024	Rural Water Supply and Sanitation	30		30				30					10
ECE-601	Design of Concrete Structures-2	50		20		20							10
ECE-603	Transportation Engg.-2	40				40			20				
ECE-653	Cad Lab-2					50				20	30		
ECE-652	Environmental Engg. Lab		40		50		10						
ECE-651	Structural Detailing Lab	30	30				10			30			
ECE-654	Survey Camp	20	40		10	30							

Course Code	**Course Title**	Mapping with Program Outcomes											
Seventh Semester		a	b	c	d	e	f	g	h	i	j	k	l
EOE-071	Enterpreneurship Development	40		10						30		20	
ECE-034	Ind.Pollution Control &Env.Audit	30					50	20					
ECE-043	Open Channel Flow	40	20			40							
ECE-701	Design of Steel	40		40						20			

	Structures												
ECE-702	Water Resources Engg.	35		35		30							
ECE-751	Seminar										50	25	25
ECE-752	Industrial Training			25		25		40	10				
ECE-753	Project	40	20	10	30								

Course Code	**Course Title**	Mapping with Program Outcomes											
Eighth Semester		a	b	c	d	e	f	g	h	i	j	k	l
EOE-075	Solid Waste Management	30	20	20		30							
ECE-052	Analysis and Design of Hydraulic Structures	40		40		10		10					
ECE-062	River Engineering	30	25	25	20								
ECE-801	Construction Technology & Management	40				40						20	
ECE-753	Project	40	20	10	30								

2.2.2.Explain how modes of delivery of courses help in attainment of the POs (10)

(Describe the different course delivery methods/modes (e.g. lecture interspersed with discussion, asynchronous mode of interaction, group discussion, project, etc.) used to deliver the courses and justify the effectiveness of these methods for the attainment of the POs. This may be further justified using the indirect assessment methods such as course-end surveys.)

PO's/ Modes of Delivery	Black/White boards(1)	Lab/Experiment(2)	Presentation(3)	Invited Talks(4)	Assignment(5)	Industrial Visit(6)	Project (7)	Industrial Training(8)
a	X	X			X	X	X	X
b		X					X	
c	X	X	X	X	X	X	X	X
d		X			X		X	X
e					X	X	X	
f			X	X			X	X
g			X		X		X	
h		X	X	X			X	X
i					X	X	X	X
j	X	X	X				X	
k		X			X	X	X	X
l			X	X	X		X	

2.2.3.Indicate how assessment tools used to assess the impact of delivery of course/course content contribute towards the attainment of course

outcomes/programme outcomes (10)

(Describe different types of course assessment and evaluation methods (both direct and indirect) in practice and their relevance towards the attainment of POs.)

Assessment Tools/ PO's	**a**	**b**	**c**	**d**	**e**	**f**	**g**	**h**	**i**	**j**	**k**	**l**
Assignments & Quiz	X	X	X	X	X							X
Minor Tests		X	X	X			X		X			
Labs/ Practicals		X		X		X			X			
Teacher's Assessment	X	X	X	X	X	X	X	X	X	X	X	X
End Semester Exam		X	X	X			X		X			
Projects	X		X	X		X	X		X	X	X	X
Seminars	X				X		X			X	X	
Industrial Training	X	X				X				X	X	X

2.2.4. Indicate the extent to which the laboratory and project course work are contributing towards attainment of the POs (10)

(Justify the balance between theory and practical for the attainment of the POs . Justify how the variousproject works (a sample of 20% best and average projects from total projects) carried as part of the programme curriculum contribute towards the attainment of the POs.)

	Programme Outcomes											
Assessments	a	b	c	d	e	f	g	h	i	j	k	l
Laboratory Description												
Environmental and Public Health Engineering	10		10			20	40			10		10
Geology/Engineering Geology	10	20				20	10	10		10	30	
Geotechnical/geo-environmental Engg	10					20	30		10	10	20	10
Hydraulic Engineering	10	10		40			20	10		10		
Structural & Concrete Engg	10	20		10	40	10				10		
Surveying	10	30			10	20			10	10		10
Transportation Engg	10	20	40				10			10		10
CAD Lab	10			20	40			20		10		
Project	10			30		20	10			10		20

2.3. Evaluation of the attainment of the Programme Outcomes (125)

2.3.1. Describe assessment tools and processes used for assessing the attainment of each PO (25)

Describe the assessment process that periodically documents and demonstrates the degree to which the Programme Outcomes are attained.

PO's	PO description	**Assessment Tools**	**Processes for attainment of PO**
a	Broadening the horizon of the students in the field of Civil Engineering, increasing their ability to apply knowledge of mathematics, science and engineering to solve real world problems	1.Assignments 2.Tutorials 3.Practicals	1.Numerical and analysis based problems. 2.Tutorials are conducted on design based problems. 3.Observation based exercises are conducted
b	Increasing the ability of students to identify, formulate and solve problems in a systematic way by appropriate collection, analysis, and interpretation of data	1.Lab Sessions	1.There are several courses in curriculum which have laboratory experiments. 2.Department has well equipped labs to fulfill this outcome. 3.Continuous evaluation is conducted based on experimental exercises.
c	Increasing their ability to design a system , component or process to meet the desired needs in an environment friendly and socially acceptable way	1.Assignments 2.Tutorials 3.Project 4.Seminar	1.Several courses to inculcate the design capability of a student are part of curriculum like Design of RCC structures, Design of steel structures etc. 2.Students are encouraged for design based mini projects and it's assessment is carried out by presentation and viva voce. 3.Design assignments are given to students.
d	Enhancing their skills to analyze complex Civil Engineering problems and obtain the solution by synthesizing simple components	1.Projects 2.Seminar	1. Mini Projects and Major Projects are taken in groups. 2.Seminars are conducted. 3.Students are encouraged to organize group events in the department by evolving internal or external members.
e	Increasing their ability to use the techniques, skills and modern engineering and Information Technology based tools (such as web-based applications and open source software etc.) to increase the creativity of students.	1.Minor Tests 2.End-semester Examination 3.Project	1.Question Papers includes the aspect of problem identification & problem solving. 2.Students are encouraged to identify the research problems independently in projects. 3.Assignments are oriented to problem identification & problem solving.
f	Enhancing awareness of students about the impact of engineering projects in a global and societal	1.Industrial Training 2.Invited Talks	1.Students are provided ample knowledge on professional ethics during the delivery of each course

	context (social, economic, legal and/or environmental implications)	3.Industrial Visits	pertaining to that course. 2.Guest lectures are arranged to give knowledge of the professional responsibilities.
g	Enhancing their ability to practice environmental concerns and related sustainable measures and be capable of carrying out environmental impact of a civil engineering project	1.Seminar 2.Practicals 3.Quizz	1.Seminars by students is integral part of every course for internal assessment marks. 2.Viva voce for laboratory exercises provide opportunity to express understanding of student. 3. Students are encouraged to ask questions in the class and carry out discussion on queries
h	Informing students about engineering ethics and professional responsibilities	1.Industrial Visits 2.Seminar	1.Several courses include the aspect of impacts of the engineering solutions on a global, economic, environmental and societal context. 2.Seminar topics delivered by the students are selected by the course coordinator to cover these aspects. 3.Certain course are designed and included in the curriculum which are especially oriented towards achievement of this objective viz. Environment impact assessment, spatial analysis for resources management, engineering geology etc.
i	Increasing their decision-making skills and innovative capability not only individually but also in a multi-disciplinary team.	1.Project 2.Seminar 3.Teacher's Assessment	1. Changes evident in the industry and society are incorporated in the course syllabi of each subject from time to time by the coordinator which implies the need of continuous learning. 2. Students are encouraged to refer to the research journals and technical magazines to abreast their current knowledge about the changes and continuous learning therefore.
j	Increasing the ability to communicate effectively by enhancing their drawing and report writing skills and oral presentation skills	1.Teacher's Assessment 2.Seminar 3.Project	1. Observation and discussion of the current issues pertaining to aspects of civil engineering are encouraged within each course. 2. Student seminars are oriented to cover the current problems related to the program. 3. Students projects touch several areas of current issues and problems and try to resolve some of

			these problems, viz. problems in solid waste management, water supply, transportation, green buildings, disaster management, groundwater availability etc.
k	Increasing awareness of students about cost, time and quality issues in construction helping them to develop social and leadership skills,	1.Project 2.Practicals 3.Invited Talks	1. Several courses within the curriculum cover the aspect of imbibing technical skills and modern engineering tools necessary for engineering practice, viz. design practices, experimental skills and software knowledge. 2. Projects in the Final year of the course are oriented towards learning the technical skills and engineering practices.
l	Providing the students with knowledge on contemporary issues in the field of civil engineering and recognizing the need for an ability to engage in continuous and life-long learning	1.Invited talks	1.Special lectures are delivered by renowned faculty from premier institutions and expert from industry on contemporary issues related to Civil Engineering.

Include information on: (50)

a) Listing and description of the assessment processes used to gather the data upon which the evaluation of each the programme outcome is based. Examples of data collection processes may include, but are not limited to, specific exam questions, student portfolios, internally developed assessment exams, project presentations, nationally-normed exams, oral exams, focus groups, industrial advisory committee;

- **Examination**- Three minor test and one special test and end semester-examinations are conducted. The overall performance in these is analyzed by statistical analysis of scoring by students.
- **Assignment and quizzes** are conducted frequently as a part of continuous assessment.
- **Seminars:**Frequent discussions on latest and innovative topic is conducted as part of curriculum.
- **Project**: Projects based on software and hardware is offered and assessed by external examiners
- **Feedback of faculty members:** Faculty gives feedback regarding the students in the course, their performances and degree of achievement in terms of PO's.
- **Feedback from students:** Feedback from students regarding faculty teaching courses and coverage of syllabus and new topics beyond scope of syllabus undertaken.
- **Feedback from alumni:** Feedback of alumni regarding achievement of PO's.
- **GATE Score/Other Competitive Exam**: Students are encouraged to appear for UPSC/IES/GATE/PS examinations as an unending effort by teachers for students to achieve great heights.

- **Placement Record:** Students placed in different companies, industries and other jobs.
- **Feedback from employer:** Feedback from employer is taken regarding performances of students in different sectors.
- **Student's Exit feedback:** Feedback from passing graduates is taken once they are about to graduate.

Questionnaire for Students' Exit Feedback

Please write the answers of following Questions:

1. Plans after Graduation (Answer in Yes/No)

- Would join Higher Education :
- Seeking Employment from campus :
- Interested in becoming Entrepreneur :
- Preparation for competitive examinations:

2. Did you get a job through the Campus Placement? :

(If yes, please provide details)

_____Salary Package _____

3. Does the University provide flexibility at Undergraduate level for selecting the courses in entire semester of study? (If Yes, please explain)
4. Do you find/feel that some subjects are not relevant in your branch of study? If yes, pleasespecify such subjects with reason.
5. Do you find any broad area of your branch of study not covered in your curriculum?
6. Have you experienced any course related problems such as syllabi, etc. that needs to be improved? If yes, please describe the problem and suggest some solution.
7. Please enlist Three best laboratories in order of priority during your study:

   I. _____
   II. _____
   III. _____

8. Name the Three good teachers who had taught in order of preference from high to low out of which at least two should be from your department.
   I. _____
   II. _____
   III. _____

9. Do you wish to stay in contact with the department after graduation (receive Newsletter, etc.)
   Yes/No

10. Please rate the followings on a scale of 1 (Needs improvement), 2 (Satisfactory), 3 (Good), 4 (Very good) and 5 (Excellent).

a) Please rate the B.Tech programme of your department
b) Please indicate necessity of the following in your B.Tech. programme

- Internship opportunities
- Study abroad opportunities
- Entrepreneurship development opportunities
- Undergraduate research opportunities
- Students organization/clubs
- Career guidance/Development opportunities

c) How do you rate the student-teacher relationship in your perspective?
d) How do you rate the hostel life in terms of physical infrastructure of hostel?
e) How do you rate hostel life in terms of food?
f) How do you rate the overall discipline of the University?
g) How do you rate extracurricular activities in terms of the facilities available?
h) How do you rate the extracurricular activities in terms of number of activities and their level?
i) How do you rate the facilities in laboratory classes?
j) How do you rate the alumni interaction?
k) How do you rate the class room teaching?
l) How do you rate supports from laboratory staffs?
m) How do you rate the Tests/Examination system?
n) How do you rate the Evaluation system?
o) How do you rate the Library facility?
p) How do you rate the quality of books in the library?
q) How do you rate the Internet facility?
r) How do you rate student canteen/cafeteria?
s) How do you rate safety aspect in the campus?
t) How do you rate the medical facility?
u) How do you rate the banking facility?

11. General Suggestions

b. The frequency with which these assessment processes are carried out.

Assessment Process	**Frequency**
Examination	At end of each semester
Assignment and quizzes	As scheduled by the instructor
Seminars	As per time-table
Project:	Throughout Year
Feedback of faculty members:	Once in a year
Feedback from students:	Once in a semester
Feedback from alumni:	Once in a year
GATE Score/Other Competitive Exam:	Once in a year
Placement Record:	Once in a year
Feedback from employer:	Once in a year

In assessment process stress is laid on performance of students in their courses as it is on a continuous basis throughout the semester. After every written Minor test and End semester examinations students are shown their valued answer scripts along with discussion of question paper.
This gives complete transparency to the evaluation process and a more structured analysis for

students to identify their mistakes. The detailed analysis of question paper helps in identifying the present areas which are to be stressed in relation to present scenario of real life situation.

2.3.2. Indicate results of evaluation of each PO (50)

c) The expected level of attainment for each of the program outcomes

The following procedure was adopted for the analysis of POs:

1. The courses offered during the entire program i.e. from semester I to semester VII have already been identified based on their percentage contribution to each Program outcome. These percentages have been identified based on the expected course outcomes and their relevance or co-relation with the corresponding PO.
2. Based on the major contribution of a course to a particular PO the courses are identified and grouped for a particular program outcome. In this way the subjects can be segregated corresponding to every PO.
3. The above is based on an assumption that one particular course mainly contributes to one PO. However this is just for ease of computation.
4. The marks obtained by each student in the courses confirming to the group of each PO are aggregated and normalized to 100. This facilitates to co-relate the level of achievement of every individual student corresponding to each PO.
5. The percentage score of each student in each PO as obtained from the above steps is further classified as follows:

Classes	**Total No. of Students**
Excellent	80% and above
Very Good	between 70% to 80%
Good	between 60% to 70%
Moderate	between 45% to 60%
Partial	between 40% to 45%

6. The percentage of students within the category very good and excellent are further computed as percentage of total student in a batch.
7. The department in its meetings have already decided the expected level of such computations and the expected level of attainment in the form of percentage of students achieving very good and excellent grades to further explain a student if he scores 70% and above in the aggregate of the group of subjects belonging to a particular PO then only he is considered to contribute as a candidate to be considered for level of attainment

Program Outcomes	**Expected level of attainment (%)**
Broadening the horizon of the students in the field of Civil Engineering, increasing their ability to apply knowledge of mathematics, science and engineering to solve real world problems	40
Increasing the ability of students to identify, formulate and solve problems in a systematic way by appropriate collection, analysis, and interpretation of data	40

Increasing their ability to design a system , component or process to meet the desired needs in an environment friendly and socially acceptable way	50
Enhancing their skills to analyse complex Civil Engineering problems and obtain the solution by synthesizing simple components.	50
Increasing their ability to use the techniques, skills and modern engineering and Information Technology based tools(such as web-based applications and open source software etc.) to increase the creativity of students	50
Enhancing awareness of students about the impact of engineering projects in a global and societal context (social, economic, legal and/or environmental implications)	40
Enhancing their ability to practice environmental concerns and related sustainable measures and be capable of carrying out environmental impact of a civil engineering project.	50
Informing students about engineering ethics and professional responsibilities	50
Increasing their decision-making skills and innovative capability not only individually but also in a multi-disciplinary team.	50
Increasing the ability to communicate effectively by enhancing their drawing and report writing skills and oral presentation skills	50
Increasing awareness of students about cost, time and quality issues in construction helping them to develop social and leadership skills,	50
Broadening the horizon of the students in the field of Civil Engineering, increasing their ability to apply knowledge of mathematics, science and engineering to solve real world problems	40

d) Summaries of the results of the evaluation processes and an analysis illustrating the extent to which each of the programme outcomes are attained; and

Program Outcomes	Excellent (80% and above)	Very Good (between 70% to 80%)	Good (between 60% to 70%)	Moderate (between 45% to 60%)	Partial (below 45%)
Broadening the horizon of the students in the field of Civil Engineering, increasing their ability to apply knowledge of mathematics, science and engineering to solve real world problems	15.63	29.69	37.50	17.19	0.00
Increasing the ability of students to identify,	18.75	28.13	35.94	17.19	0.00

formulate and solve problems in a systematic way by appropriate collection, analysis, and interpretation of data					
Increasing their ability to design a system , component or process to meet the desired needs in an environment friendly and socially acceptable way	20.29	34.78	24.64	20.29	0.00
Enhancing their skills to analyse complex Civil Engineering problems and obtain the solution by synthesizing simple components.	21.74	34.78	30.43	13.04	0.00
Increasing their ability to use the techniques, skills and modern engineering and Information Technology based tools(such as web-based applications and open source software etc.) to increase the creativity of students	24.64	28.99	21.74	24.64	0.00
Enhancing awareness of students about the impact of engineering projects in a global and societal context (social, economic, legal and/or environmental implications)	19.40	26.87	35.82	17.91	0.00
Enhancing their ability to practice environmental concerns and related sustainable measures and be capable of carrying out environmental impact of a civil engineering project.	11.59	43.48	26.09	18.84	0.00
Informing students about engineering ethics and professional responsibilities	14.49	36.23	37.68	11.59	0.00
Increasing their decision-making skills and innovative capability not only individually but also in a multi-disciplinary team.	18.57	37.14	34.29	10.00	0.00
Increasing the ability to communicate effectively by enhancing their drawing and report writing skills and oral presentation skills	4.48	52.24	40.30	2.99	0.00
Increasing awareness of students about cost, time and quality issues in construction helping them to develop social and leadership skills,	22.39	29.85	34.33	13.43	0.00

e) How the results are documented and maintained

The process for documentation and maintenance of results is described below:

1. The evaluated answer sheets of End semester Examination and all the Minor tests copies are sent to the Examination section with a copy of mark sheets.
2. The marks are uploaded on a common portal with user specific credentials.
3. After the uploading of marks verification of the uploaded marks is done by designated two faculty members from the Department.

4. Further Additional Controller of examination and Controller of examination verifies the same.
5. After the complete verification process final results are generated in Tabular sheets and signed by the representative of the Department and COE and Addl. COE.
6. Then the final results are declared.
7. The soft copy of tabulation sheet is sent to the Head of Department for further analysis and necessary action.

Further the examination section headed by COE and Addl. COE looks after maintenance and documentation of marks for each student.

2.4. Use of evaluation results towards improvement of the programme (30)

2.4.1. Indicate how the results of evaluation used for curricular improvements (5)

(Articulate with rationale the curricular improvements brought in after the review of the attainment of the POs)

The most important factor which plays a key role in attainment of PO's is the structure and contents of curriculum. The flow of curriculum prepares student from understanding basics to implementing new methodologies in existing methods used in Civil engineering. The programme is designed with a full stress on making student confident with the practices followed in technical outside world so that the pace of growth of one is not compromised.

The changing patterns of technical society pertaining to civil engineering are deduced by:

i) Meetings among faculty members to impart changes in curriculum and introducing new courses to make programme more outcome specific.

ii) Interaction of alumni with faculties helps in reviewing the existing curriculum and inputs are taken from them for betterment of programme.

iii) Time to time interaction of students those who have passed recently with faculty members provides an insight of the programme from the side of employer as well.

iv) Several new elective courses are floated in department from time to time depending upon the need realized

2.4.2. Indicate how results of evaluation used for improvement of course delivery and assessment (10)

(Articulate with rationale the curricular delivery and assessment improvements brought in after the review of the attainment of the POs)

Based on the evaluation of the attainment of POs and along with the results and analysis of thefeedback from stakeholders about the curriculum, the methods of course delivery and assessment are modified from time to time. The analysis stresses on the following areas:

Based on the evaluation of the attainment of POs and along with the results and analysis of the feedback from stakeholders about the curriculum, the methods of course delivery and assessment are modified from time to time. The analysis stresses on the following areas:

1) Knowledge of teacher in the concerned subject and interaction in the class
2) Use of Blackboard and proper handwriting
3) Ability to create interest by giving real life example in context of course
4) Availability of Books, Manuals, Codes of Practice etc.
5) Laboratory facilities
6) Library facility

7) Teacher Student interaction

2.4.3. State the process used for revising/redefining the POs (15)
(Articulate with rationale how the results of the evaluation of the POs have been used to review/redefine the POs in line with the Graduate Attributes of the NBA.)

- In the programme faculties are continuously involved in monitoring and achieving the desired PO's as standardized contributing to the overall growth of department. The following ways help to revise and redefine PO's if needed:
- The frequent discussion, talks, meetings and lectures from the renowned industry experts helps in identifying new emerging areas and incorporating changes in order to keep updated with the need of hour.
- The continuous meetings among faculty members and with students presently in the programme.
- The compilation of statistics of graduates already passed helps in assessing the employability of all.
- Successive interaction with Alumni and their perspective about the PO's and the extent to which department is able to cater.

As PO's are articulated and implemented recently hence it is always acceptable to implement changes to bring forth the best graduates from the programme. The overall stress is on producing graduates who can serve society, practice sustainable means and possess state of the art of Civil Engineering.

2.4.3. State the process used for revising/redefining the POs (15)
(Articulate with rationale how the results of the evaluation of the POs have been used to review/redefine the POs in line with the Graduate Attributes of the NBA.)

In the programme faculties are continuously involved in monitoring and achieving the desired PO's as standardized contributing to the overall growth of department. The following ways help to revise and redefine PO's if needed:

- The frequent discussion, talks, meetings and lectures from the renowned industry experts helps in identifying new emerging areas and incorporating changes in order to keep updated with the need of hour.
- The continuous meetings among faculty members and with students presently in the programme.
- The compilation of statistics of graduates already passed helps in assessing the employability of all.
- Successive interaction with Alumni and their perspective about the PO's and the extent to which department is able to cater.

As PO's are articulated and implemented recently hence it is always acceptable to implement changes to bring forth the best graduates from the programme. The overall stress is on producing graduates who can serve society, practice sustainable means and possess state of the art of Civil Engineering.

III. Programme Curriculum (125)

3.1. *Curriculum* (20)

3.1.1. Describe the Structure of the Curriculum (5)

I Semester

Course Code	Course Title	L	T	P	Credit	Prerequisite	Category
BAS-01	Engineering Mathematics	3	1	0	4	Intermediate Mathematics	Basic Science
BAS-02	Engineering Physics	3	1	2	5	Intermediate Physics	Basic Science
BCE-01	Mechanics of Structures	3	1	2	5	Basics of Physics	Engineering Fundamentals
BCS-01	Introduction to Computer Programming	3	1	2	5	Fundamentals of computer	Engineering Fundamentals
BAS-03	Professional Communication	3	1	0	4		Humanities
BCE-10	Engineering Graphics	0	0	4	2	Drawing Skills	Engineering Fundamentals
BAS-05	Environment & Ecology	2	1	0	-		Audit Course

II Semester

Course Code	Course Title	L	T	P	Credit	Prerequisite	Category
BAS-07	Engineering Mathematics II	3	1	0	4	Intermediate Mathematics	Basic Science
BAS-08	Engineering Physics-II	3	1	2	5	Intermediate Physics	Basic Science
BAS-09	Engineering Chemistry	3	1	2	5	Intermediate Chemistry	Basic Science
BEE-01	Principles of Electrical Engineering	3	1	2	5		Engineering Fundamentals
BAS-**	Humanities & Social science Electives	2	1	0	3		Humanities
BME-10	Workshop Technology	0	0	4	2		Engineering Fundamentals
BEC-01	Fundamentals of Electronics Engineering	3	1	2	-		Audit Course

III Semester

Course	Course Title	L	T	P	Credit	Prerequisite	Category

Code							
BAS-07	Engineering Mathematics-III	3	1	0	4	Intermediate Mathematics	Basic Science
BCE-11	Concrete & Concrete Structures	3	1	0	4		Departmental Core
BCE-12	Basic Surveying	3	1	2	5		Engineering Fundamentals
BCE-13	Fluid Mechanics	3	1	2	5		Basic Science
BCE-14	Structural Mechanics-I	3	1	2	5	Mechanics of Structures	Departmental Core
BCE-15	Engineering Geology & Building Materials	0	0	4	2		Engineering Fundamentals
BAS-22	Nano Technology	2	1	0	-	Basic Physics	Audit Course

IV Semester

Course Code	Course Title	L	T	P	Credit	Prerequisite	Category
BAS-24	Applied Computational Methods	3	1	2	5		Basic Science
MBA-01	Industrial Management	2	1	0	3		Management
BCE-16	Hydraulic and Hydraulic machines	3	1	2	5	Fluid Mechanics	Departmental Core
BCE-17	Structural Mechanics-II	3	1	0	4	Structural Mechanics-I	Departmental Core
BCE-18	Advanced Surveying	3	1	2	5	Basic Surveying	Departmental Core
BCE-19	Building Construction & Planning Estimation and Costing	3	1	2	5	Engineering Graphics	Departmental Core
BAS-20	Communication Skills	0	0	4	-		Audit Course

V Semester

Course Code	Course Title	L	T	P	Credit	Prerequisite	Category
EHU-501	Engineering & Managerial	3	1	0	3		Management

	Economics						
ECE-501	Geotechnical Engg	3	1	0	4	Engineering Geology	Departmental Core
ECE-504	Structural Analysis-2	3	1	0	4	Structural Analysis -I	Departmental Core
ECE-505	Design of concrete structures-1	3	1	0	4	Concrete and Concrete structures	Departmental Core
ECE-502	Transportation Engg-1	2	1	0	3	Environment & Ecology	Departmental Core
ECE-503	Environmental Engg-1	2	1	0	3		Departmental Core
ECE-551	Geotechnical Engg. Lab	0	0	3	1		Departmental Core
ECE-552	Transportation Lab	0	0	3	1		Departmental Core
ECE-553	Cad Lab-1	0	0	3	1		Departmental Core
ECE-554	Quantity Estimation & Survey	0	0	1	1	Building Planning & Design	Departmental Core

VI Semester

Course Code	Course Title	L	T	P	Credit	Prerequisite	Category
EHU-601	Industrial Management	3	0	0	3		
ECE-602	Environmental Engg.-2	3	1	0	4	Environmental Engg.-1	Departmental Core
ECE-011	Advanced Foundation Design	2	1	0	2	Geotechnical Engg.	Departmental Elective
ECE-024	Rural Water Supply and Sanitation	3	1	0	4	Environmental Engg.-1	Departmental Elective
ECE-601	Design of Concrete Structures-2	3	1	0	5	Design of Concrete structures-1	Departmental Core
ECE-603	Transportation Engg.-2	2	1	0	3	Transportation Engg.-1	Departmental Core
ECE-653	Cad Lab-2	0	0	3	1		Departmental Core
ECE-652	Environmental Engg. Lab	0	0	3	1		Departmental Core
ECE-651	Structural Detailing Lab	0	0	3	1	Design of Concrete structures 1 & 2	Departmental Core
ECE-654	Survey Camp				1	Advanced Surveying	

GP-601	General Proficiency				1		

VII Semester

Course Code	Course Title	L	T	P	Credit	Prerequisite	Category
EOE-071	Enterpreneurship Development	3	1	0	4		Open Elective
ECE-034	Ind.Pollution Control &Env.Audit	3	1	0	4	Environmental Engineering 1& 2	Departmental Elective
ECE-043	Open Channel Flow	3	1	0	4	Hydraulics & Hydraulic Machines	Departmental Elective
ECE-701	Design of Steel Structures	3	1	0	4	Structural Analysis II	Departmental Core
ECE-702	Water Resources Engg.	3	1	0	4	Fluid Mechanics	Departmental Core
ECE-751	Seminar	0	0	4	1		
ECE-752	Industrial Training				1		
ECE-753	Project	0	0	4	3		Project
GP-701	General Proficiency				1		

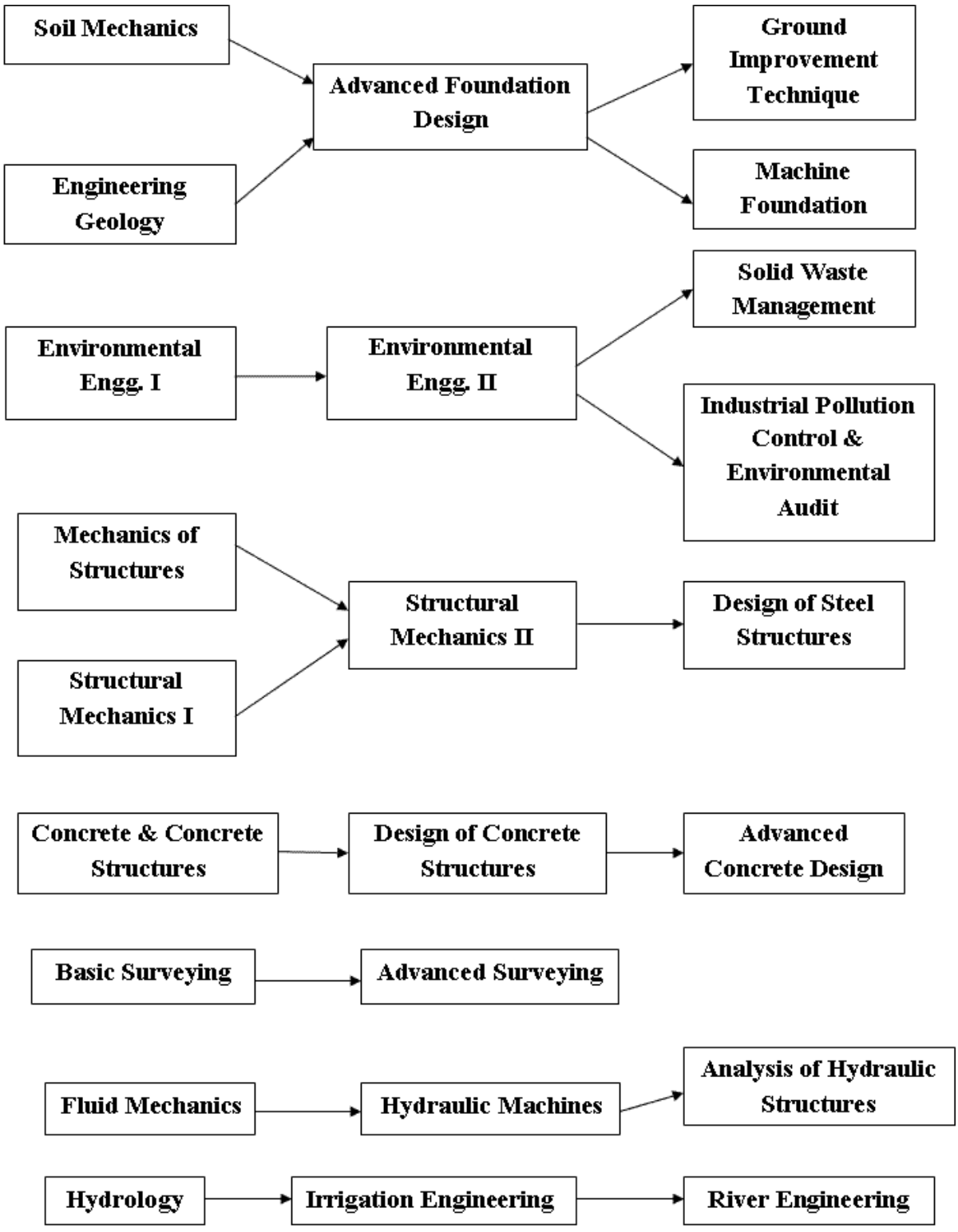
VIII Semester

Course Code	Course Title	L	T	P	Credit	Prerequisite	Category
EOE-075	Solid Waste Management	3	1	0	4	Environmental Engineering II	Open Elective
ECE-052	Analysis and Design of Hydraulic Structures	3	1	0	4	Hydraulics & Hydraulic Machines	Departmental Elective
ECE-062	River Engineering	3	1	0	4	Open Channel Flow	Departmental Elective
ECE-801	Construction Technology & Management	3	1	0	3	Quantity estimation & Survey	Departmental Core
ECE-753	Project	0	0	12	8		Project
GP-701	General Proficiency				1		

#Seminars, project works may be considered as practical

3.1.2. Give the Prerequisite flow chart of courses (5)

(Draw the schematic of the prerequisites of the courses in the curriculum)



3.1.1 Justify how the programme curriculum satisfies the program specific criteria (10)

(Justify how the programme curriculum satisfies the program specific criteria specified by the American professional societies relevant to the programme under accreditation)

The programme curriculum has been designed by following the highly stressed criteria as

mentioned by the Lead Society: American Society of Civil Engineers. The programme curriculum of B.Tech in Civil Engineering at Madan Mohan Malaviya University of Technology, Gorakhpur is dedicated to achieve its PO's as stated earlier and regularly monitors the progress of achievement. The specific criteria which are proposed by American Society of Civil Engineers are mentioned below:

1) Curriculum

a) The programme is dedicated to impart in its graduate the ability to apply knowledge of basic science and mathematics to solve and analyze highly intricate real life problems. This mandates understanding of Physics, Chemistry and Mathematics as base to analyze and understand any natural process like exhaust from automobiles i.e. understanding Atmospheric Physics and Chemistry integrating with mathematics meets the datum in achieving program educational objectives. Other phenomenon occurring and their relative understanding helps in achieving PO's of the programme on technical and knowledge basis.
b) Owing to the adaptability of the curriculum there are many domains which are continuously worked but more emphasis is laid to make graduate able to work as Structural Engineer, Transportation Engineer, Geotechnical Engineer, Environmental Engineer, Water Resource Engineer and surveyor as the backbone of each specialization.
c) Various Laboratory Exercises are held specific to the courses to make student aware of the real situation. The experiments are designed in such a way that the interpretation of real time phenomenon is imparted.
d) The courses are selected that one develops understanding for simpler problems first then moving to complex designs in practical world.
e) Apart from regular core courses there are various courses which focus on the management, professional and ethical and human values.

In addition to this ASCE (2009), specifically mentioned that a Civil Engineer should have:

- An ability to understand and explain the key concepts used in management, business, public policy, public administration, leadership principles, and licensure.
- Understanding of at least one area of natural sciences, such as geology, ecology, or biology.

And hence to facilitate the programme specific criteria for Department of Civil Engineering at MMMUT, Gorakhpur subject such as Geology as two compulsory credits and Environment & Ecology as Audit Course is a part of programme curriculum. To impart better understanding of natural sciences, 1st year is dedicated to the domains of these subjects along with certain programme specific courses.

To acquaint the students with the concept of business and management subjects such as**Industrial Management** of 3 credits and **Entrepreneurship Development** of 4 credits are included in the programme curriculum. Also there are several audit courses which include the domain of leadership principles and public policy.

2) Faculty

The Programme very well includes the necessity of faculty from different areas of expertise. The emphasis is to have multi-disciplinary team of teachers to be a part of department.

- The Programme has well qualified and much experienced teachers in different fields.
- Most of them possess highest qualification (Ph.D) and have newer areas of research interest.
- Involvement of faculty members in the Consultancy projects helps in defining new design practices.

Industrial Management of 3 credits and Entrepreneurship Development of 4 credits are included in the programme curriculum. Also there are several audit courses which include the domain of leadership principles and public policy.

Component	**MMMUT, Gorakhpur**	**GATS**	**AICTE(2012)**	**KC**	**ABET(2012-13)**
Basic Science	36%	10-15% Incl Math	15-20% Incl Math	12%	"(a) one year of a combination of college level mathematics and basic sciences (some with experimental experience) appropriate to the discipline. Basic sciences are defined as biological, chemical, and physical sciences."(i.e. 25%)
Math				8%	
Engg. Sc.	24%	15-17%	15-20%		"(b) one and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study. The engineering sciences have their roots in mathematics and basic sciences but carry knowledge further toward creative application. These studies provide a bridge between mathematics and basic sciences on the one hand and engineering practice on the other. Engineering design is the process of devising a system, component, or process to meet desired needs. It is a decision-making process (often iterative), in which the basic sciences, mathematics, and the engineering sciences are applied to convert resources optimally to meet these stated needs."(i.e. 37.5%)
Basic Engg				10%	
Engg. Skills				5%	
Professional Core	78%	22.5-27.5%	30-40%	30%	
Professional Lab				10%	
Electives	19%	19.5-25%	10-15% Prof'nl 5-10% Open	5%	
Minor inclMgmt	3%			6%	"(c) a general education components that complements the technical content of the curriculum and is consistent with the program and institution objectives."
HSS	7%	10-15% InclMgmt	5-10 % InclMgmt	10%	
Industrial Trng	3%	2.5- 5 %		1%	
Project	10%	5-12.5%		3%	"Students must be prepared for engineering practice through a curriculum culminating

					in a major design experience based on the knowledge and skills acquired in earlier course work and incorporating appropriate engineering standards and multiple realistic constraints."
Total credits	180+ 20 (Additional Audit+ Seminar+ Training)		176(+8 units mandatotynon credit courses)		~ 128

3.2. State the components of the curriculum and their relevance to the POs and the PEOs (15)

Programme curriculum grouping based on different components

Course Component	Curriculum Component (% of total number of credits of the program)	Total Number of Contact Hours	Total Number of Credits	POs	PEOs
Mathematics	6	12 hr/week	12	a,b,i,k	B,C
Sciences	10	24 hr/week	20	a,b,f,g,i,k	A,B,C
Computing	5	12 hr/week	10	b,e,k	B,C
Humanities	6	12 hr/week	12	a,c,f,g,h	A,C
Professional Core	63	24 hr/week	127	a,b,c,d,f,g,l	A,B,C
Audit Courses	7	14 hr/week	13	a,c,f,g,l	A,B,C
Open Elective	4	8 hr/week	8	a,b,e,f	B,C

3.3 State core engineering subjects and their relevance to Programme Outcomes including design experience (60)

(Describe how the core engineering subjects in the curriculum are giving the learning experience with the complex engineering problems)

Course Code	**Course Title**	Course Outcomes	POs
First Semester			
BCE-01	Mechanics of Structures	1. Able to understand how to compute the force, magnitude and direction. 2. Develop the ability to analyze forces in mechanics of structure in project and feasibility of project throughout their life cycle. 3. Students will be able to know the different types of forces, dynamics and	a,b,e,g

		kinematics in projects. 4. Students will be able to know compute and control various types of forces in mechanics of structure aspects and its provision. 5. Students studying this method, find it difficult to cope up with subject like, strength of materials, structural analysis, structural design, and machine design.	
BCE-10	Engineering Graphics	1. How Engineering Drawing helps to sketch the imagination? 2. Able to effectively practice the different scales for drawings. 3. Effectively analyze the geometrical shapes and to be able to draw. 4. About solids and discuss about their classification. 5. How toimplement the different views for a solid placed in 3D space. 6. Construction of the object from different perspective. 7. Comparison and contrast between frustum and truncated solid. 8. Sketching of different sections for any 3d regular object. 9. Discussing the principles of isometric projection. 10. Sketching isometric projections for different geometrical shapes and solids.	a,b,c,h
BAS-05	Environment & Ecology	1. Students will acquire basic knowledge in Environment and Ecology, which allows students to gain qualitative and quantitative skills. 2. Students will be aware of environmental pollution and control methods along with quality standards of air, water etc along with waste management. 3. Students will be able to give systematic account of natural resources their use of exploitation and environment. 4. How to achieve sustainable development through strategies and its threats	a,c,i,k,l

Course Code	**Course Title**	Course Outcomes	POs

Third Semester			
BCE-11	Concrete & Concrete Structures	1) Concrete technology. 2) Working stress design method of concrete structures. 3) Limit State design method of concrete structures. 4) Design of singly and doubly reinforced beam by above two methods. 5) Design of one way and two way slabs.	a,b,c,d,e,k
BCE-12	Basic Surveying	1. By collecting data with errors, students gain a better appreciation of data quality and how instruments and field techniques contribute to error. 2. Students learn rules for handling systematic errors, random errors and blunders. 3. Students learn elementary statistical methods to aid in error control. 4. Students appreciate the concepts of accuracy and precision. 5. Students understand how to meet client expectations in terms of data quality. 6. Students develop an appreciation of how one set of surveying data relates to another. 7. Students learn the importance of referencing their projects properly. 8. Students learn to work with others, respect the contributions of others, resolve difficulties, and understand responsibility. 9. Students will learn surveying techniques that will remain current for long periods of time. 10. Students understand the range of calculations that can be made with surveying data and understand the linkages between surveying data and engineering design. 11. Students learn how surveying data may be stored and retrieved for a variety of purposes. 12. Students develop proficiency in working with raw data. Students see applications of their previous education in mathematics. 13. Students understand the range of surveying instrumentation and the appropriate uses of each class of instrument. 14. Students learn how surveying data is clearly and ethically reported	a,b,e,j

BCE-13	Fluid Mechanics	1. Understand how to make measurements of flow. 2. Understand the type and nature of flow. 3. Be able to explain several important principles. 4. Explain and describe the difference between smooth and rough surface. 5. Develop the skills in analyzing the problems.	a,b,e,h
BCE-14	Structural Mechanics-I	1. Students learn different methods for how calculate the stress strain. 2. Students learn to establish the relation b/w different moduli of elasticity of different materials. 3. Students learn how to apply Hooks law, and how to draw the Mohr's circle for calculating the stress. 4. Students learn different types of load , beams, structures, reactions, types of structures. 5. Students understand how to calculate the reactions, calculation of bending moment and shear force, and how to draw the bending moment and shear force diagram for different type of structures. 6. Students learn about the columns and how buckling is occurred in columns due to loading. 7. Students learn how to analyze the different type of structures by different methods. 8. Students learn the how failure is occurred in the structures.	a,b,c,e,f,j
BCE-15	Engineering Geology & Building Materials	1. A clear understanding of rocks and their minerals 2. A clear understanding of properties of building materials like cement, aggregates, concrete,lime and bricks. 3. Be able to perform several experiments to find out consistency, initial and final setting time of cement, workability of concrete, crushing strength of aggregates etc.	a,b,c,g,k

Course Code	**Course Title**	**Course Outcomes**	**POs**

Forth Semester			
BAS-24	Applied Computational Methods	1. To be familiar with the software package Mathematica and learn how to solve mathematical problems with it. 2. To use the software for teaching mathematics at various educational levels. 3. To study linear and nonlinear problems and to solve them computationally. 4. To use methods of Fourier series and then numerical methods for solving ordinary differential equations. 5. To use methods of dimensional analysis and perturbation theory using computer packages. 6. To be able to use methods from calculus of variations by solving problems for extremums of functionals.	a,b,e,f,g
BCE-16	Hydraulic and Hydraulic machines	1. Understand how to make measurements of flow 2. Understand the type and nature of flow. 3. Be able to explain several important principles of machines. 4. Develop knowledge and understanding of more advanced aspects of hydraulics and hydraulic machines. 5. Explain and describe centrifugal and mixed flow pumps 6. Explain and describe different types of turbines 7. Be able to explain several important principles of hydraulics and hydraulics machines. 8. Develop some skills in analyzing the problems. 9. Designing the hydraulic structures like spillway, barrage.	a,b,c,d,e
BCE-17	Structural Mechanics-II	1. To analyse indeterminate structures by using different compatibility equations used in various methods. 2. To analyse the shear force , Thrust and bending moment acting on two hinged arches. 3. To draw the influence line diagram for moving or rolling loads so as to determine maximum bending moment, shear force etc. 4. To find out the forces acting on two hinged and three hinged stiffening	a,b,e,l

		girders. 5. To draw the Influence line diagram for maximum bending moment and shear forces for stiffening girders. 6. To formulate matrices for computation of unknown member forces in high degree indeterminate structures. 7. To do the plastic analysis of the structures so as to use its ultimate strength. 8. To determine the collapse load of different structures.	
BCE-18	Advanced Surveying	1. Students learn the method of triangulation and are able to demonstrate the working of Total Station 2. Students learn the importance of precision and accuracy in taking observations. 3. Students learn the different types of curves and methods to set them out. 4. Students learn the fundamental of photo interpretation	a,d,j,k
BCE-19	Building Construction & Planning Estimation and Costing	1. Identify quantities of the various materials involved in the project. 2. Create summaries and detailed quantity surveying reports quickly and easily. 3. Count and quantify all of your project design data more quickly and easily. 4. Generate quantities linked to specific objects. 5. Perform interactive examination of 3D models for material cost estimating purposes. 6. Compile, update, and interact with quantity-related project data.	a,b,c,h,l
BAS-20	Communication Skills	1. Use theories of interpersonal communication to explain and evaluate their own behavior in interpersonal relationships. 2. Synthesize and apply appropriate and effective conflict management strategies.	a,b,f,g,j

Course Code	**Course Title**	Course Outcomes	POs
Fifth Semester			
ECE-501	Geotechnical Engg	1. Describe the fundamental differences in engineering behavior between cohesive and cohesionless soils.	a,b,e,j

		2. Compute the groundwater seepage and distribution of groundwater pressure. 3. Compute the applied stress beneath the ground surface. 4. Demonstrate to know the fundamental difference in the strength and deformation characteristics of cohesive and cohesionless soils. 5. Analyze field and laboratory data to determine the strength and deformation properties of cohesive and cohesionless soils. 6. Compute settlements due to consolidation of soil 7. Prepare soil investigation report based on the result of various field tests. 8. Design a shallow foundation.	
ECE-504	Structural Analysis-2	1. To analyse indeterminate structures by using different compatibility equations used in various methods. 2. To analyse the shear force , Thrust and bending moment acting on two hinged arches. 3. To draw the influence line diagram for moving or rolling loads so as to determine maximum bending moment, shear force etc. 4. To find out the forces acting on two hinged and three hinged stiffening girders. 5. To draw the Influence line diagram for maximum bending moment and shear forces for stiffening girders. 6. To formulate matrices for computation of unknown member forces in high degree indeterminate structures. 7. To do the plastic analysis of the structures so as to use its ultimate strength. 8. To determine the collapse load of different structures.	a,b,c,e,f,j
ECE-505	Design of concrete structures-1	1. Understand the concrete making materials and their properties. 2. Understand the basis of proportioning of concrete. 3. Understand various philosophies for design of reinforced concrete. 4. Analyze singly and doubly reinforced concrete rectangular sections . 5. Find moment of resistance of singly and doubly reinforced rectangular sections by	a,b,c,d,e,l

		working stress method 6. Understand Limit state method of design 7. Apply the concept of limit state method of design for rectangular and flanged sections. 8. Understand the behavior of rectangular sections under shear. 9. Understand the behavior of beams with and without shear reinforcement 10. Understand bond between steel and concrete and derive expression for development length of bar in flexure and anchorage. 11. To understand failure of beam under shear and the concept of equivalent shear. 12. To understand failure of beam under shear and bending moment. 13. To understand concept of equivalent shear and Bending Moment 14. Design a real life problem limit state method (beam). 15. Understand the concept of one way and two way slab. 16. Understand the provisions of IS456:2000 for design of one way and two way slab. 17. Design one way and two way slab by limit state method. 18. Understand the behavior of R.C.C. column and various types of end connections. 19. Understand the provisions of IS456:2000 for design of R.C.C. Columns with and without eccentricity. 20. To use Design Chart for design of columns subjected to uni-axial biaxial bending	
ECE-502	Transportation Engg-1	1. Types of pavements and their components. 2. Materials used for highway construction. 3. Methods of design of flexible and rigid pavement including IRC method. 4. Construction and maintenance of different types of pavements.	a,b,c,e,j
ECE-503	Environmental Engg-1	1. To discuss water demand, sources of water and intake structures. 2. To understand transmission of water. 3. To discuss various types of conduits, laying and testing of water supply pipe	a,b,c,e,k,l

		lines and related issues. 4. To describe storage and distribution of water, design of water distribution system and plumbing systems in buildings.. 5. To describe systems of sanitation and waste water collection. 6. To estimate waste water flows and variations. 7. To design sewers. 8. To discuss types, materials and construction of sewers. 9. To explain the concept of shall bore sewer systems. 10. To do planning of sewerage systems.	
ECE-551	Geotechnical Engg. Lab	1. Ability to classify soils with a view toward assessing the suitability of a given soil for use in a designed, constructed facility e.g. foundation, embankment, or highway 2. Ability to evaluate compaction characteristics and interpret field compaction results with respect to compaction specifications 3. Ability to apply engineering science principles, using shear strength and compressibility parameters, to analyze the response of soil under external loading. 4. Ability to obtain in-situ soil properties required for many design applications	a,b,e,j
ECE-552	Transportation Lab	1. The students will be able to test highway materials like aggregate and bitumen and can take appropriate conclusion. 2. To understand the mix design concept for bitumen's. 3. Students will be able to undertake traffic studies 4. To apply the concept of properties of materials for design of roads .	a,b,c,e,l
ECE-553	Cad Lab-1	1. To use of the fundamental features of AutoCAD. 2. To navigate the AutoCAD user interface. 3. To use the precision drafting tools in to develop accurate technical drawings. 4. To drawings in a detailed and visually impressive manner.	a,b,h,k

ECE-554	Quantity Estimation & Survey	1. The students will be able to compute project cost material, rate analysis etc. 2. Understand the different types of estimation rate analysis to be used in the construction project. 3. Students will be able to undertake Quantity surveying studies.	a,b,f,k

Course Code	**Course Title**	Course Outcomes	POs
Sixth Semester			
ECE-602	Environmental Engg.-2	1. Discuss beneficial uses of water, quality requirements and standards. 2. Understand water borne diseases and their prevention and control. 3. Discuss objectives of water and waste water treatment, unit operations and processes and flow sheets. 4. Understand settling phenomena, coagulation and flocculation. 5. Design primary and secondary settling tanks, flocculators and clariflocculators. 6. Understand theory of filtration and various types of filters, disinfection process and water softening along with dosing requirements. 7. Understand preliminary, primary, secondary and tertiary treatment of waste water. 8. Design primary and secondary waste water treatment processes. 9. Discuss anaerobic digestion of sludge and the basic concept of emerging technologies for waste water treatment.	a,b,c,d,j,l
ECE-011	Advanced Foundation Design	1. Ability to evaluate stress distribution below a loaded area. 2. Ability to to determine the bearing capacity of various foundations. 3. Ability to apply engineering science principles, using shear strength and compressibility parameters, to design foundation in expansive soils.. 4. Ability to evaluate consolidation properties of soils and apply those properties to settlement problems frequently encountered in civil engineering	a,b,c,e

		5. Gain a broad understanding of vibration due to dynamic loading.	
ECE-024	Rural Water Supply and Sanitation	1. Summarize the various problems in terms of water supply and sanitation in rural areas. 2. Interpret the reasons for failure and success of various government policies. 3. Calculate and estimate the water demand for regions. 4. Proposing changes in existing methods for rural water supply. 5. Select the proper water treatment methods for surface water. 6. Designing water distribution network for rural areas. 7. Explain the various structures constructed to stop open defecation 8. Designing waste water collection system for rural areas. 9. Estimation of waste generation and designing units for disposal. 10. Proposing various model for imparting behavioral change in practices followed by rural people.	a,b,c,d,e,k
ECE-601	Design of Concrete Structures-2	1. Use and apply design codes. 2. Understand design loads for strength and serviceability and their importance in limit state design. 3. Explain the nature of concrete and steel and how they work as composites. 4. Design reinforced concrete members and structures. 5. Design Prestress members and structures.	a,b,c,d,e,k
ECE-603	Transportation Engg.-2	1. Understand the knowledge of various systems of railway, airport and water transportation. 2. Understand the design concept of railway track, runway, taxiway etc. 3. Apply the concept of geometric design of railway, runway, taxiway etc. 4. Apply the knowledge of various signaling system for railway engineering, air traffic control, navigational aids, etc.	a,b,c,e,j
ECE-653	Cad Lab-2	1. Plan, Schedule and Cost the Project Calculate Earned Value Generate Reports. 2. Water CAD analysis output are the	a,e,h,l

		flow for each pipe in the network and the velocities, the pressure for each node and the total head, the head loss in each pipe and more of hydraulic output analysis. 3. Also provide the basic guidelines to create a simple map (layout in Arc GIS terms) of Travis County using standard cartographic components	
ECE-652	Environmental Engg. Lab	1. Understand the determination of some important water and waste water characteristics in laboratory. 2. Understand the measurement of air pollutants in ambient air. 3. Know the measurement of sound pressure level with sound level water and its applications.	a,b,c,f
ECE-651	Structural Detailing Lab	1. How to design the concrete structures. 2. What is the maximum and minimum reinforcement in beam? 3. What is the horizontal and vertical spacing between bars? 4. How to design column.	a,b,f,l
ECE-654	Survey Camp	1. Be able to conduct topographical survey of a given area. 2. Be able to prepare topographical maps of an area. 3. Knowledge of practical implementation of different survey works.	a,d,f

Course Code	**Course Title**	Course Outcomes	POs
Seventh Semester			
ECE-034	Ind.Pollution Control &Env.Audit	1. Discuss about various types of waste and their origin from different industries. (Understanding) 2. Explain the various control and abatement techniques for control of pollution.	a,b,c,e,f,g,k

		(Analyzing) 3. Illustrate the various types of pollutants released by different industries. (Applying) 4. Categorize various control and abatement techniques for handling industrial waste.(Analyzing) 5. Defend the concept of zero discharge effluent from industries. (Evaluating) 6. Identify the types of industries as sources of harmful gaseous emissions.(Analyzing) 7. Recommend the control and abatement technology for harmful emissions from industries.(Evaluating) 8. Discuss about the solid waste generation from industries. (Evaluating) 9. Figure out the life cycle analysis for any by-product of specific industry. (Evaluating) 10. Differentiate between environmental audit and accounts credit. (Analyzing)	
ECE-043	Open Channel Flow	1. To explain the terms of the open channel flow equations and explain the interaction among the terms. 2. To develop the open channel flow equations from the basic conservation equations. 3. To solve open channel flow problems through the selection and use of appropriate equations. 4. To explain the physical mechanisms and mathematical relationships for hydraulic jumps, surges, and critical, uniform, and gradually-varied flows as well as spatially varied flow. 5. Analysis and design of open channel controls, upstream and downstream controls, & spatially varied flow. 6. Analysis and design of open channel transition, functions, and energy dissipaters 7. Ability to design culverts etc. 8. To present a technical concept both written and orally.	a,b,c,h,j
ECE-701	Design of Steel Structures	1. General Considerations such as loads, design philosophies etc. 2. Connections in Steel Structures such as Riveted, Bolted, Pinned, and Welded connections. 3. Different types of members such as	a,b,c,d,e

		tension and compression. 4. Design of beams and their special cases such as Lintels, Purlins. 5. Recognize and account for different instability phenomena that might govern the load carrying capacity of steel elements. 6. Perform design of steel members and connections.	
ECE-702	Water Resources Engg.	1. Design of water management systems utilizing the basic principles of the hydrologic cycle. 2. Apply knowledge for efficient design methods for rapid conveyance of water with lesser loss in irrigation canals. 3. To demonstrate a knowledge of the multi-disciplinary nature of water resources engineering. 4. Realize the importance of optimal water use for growing the crops, and apply methods for saving land from water-logging. 5. To demonstrate technique involved in making design problems of canal and related structures to be safe and cost effective. 6. Apply the knowledge in the design of hydraulic structures to be constructed for conveyance of irrigation water. 7. Apply the silt control devices in canals and natural channels for long life of irrigation schemes. 8. Formulate irrigation networks across the country to make itself self reliant in food grain production. 9. Enumerate the need of water resource conservation and management to overcome the natural calamities such as drought and flood and its protection measures.	a,d,f,l
ECE-751	Seminar	1. Basics and principles of value management 2. Characteristics and components of Emotional Intelligence(EI) 3. Improvement of your own EI 4. Control and management of your emotions and emotions of others 5. Motivation and implementation of values	a,b,k,l

		into your company 6. How to unite employees and management of your company 7. How to build and support great and valuable talent. 8. Using art and music in your company 9. Use discussion and the process of writing to enhance intellectual discovery and unravel complexities of thought.	
ECE-752	Industrial Training	1. Understand the fundamental concepts of civil engineering, its necessity and importance. 2. Apply the knowledge in selecting suitable materials, and construction technique required for a particularconstruction activity. 3. Understand the significance of various suitable tools and plants to be used as per the given site conditions. 4. Execute and handle the projects individually and on team basis. 5. Manage the various activities of a construction project	a,b,c,h
ECE-753	Project	1. To develop basic concept and principle of real life problems in Civil engineering 2. Understand the behaviour of simple and comples problems related with Civil Engineering. 3. Recognize and be able to apply fundamental principles to check the accuracy , safety and reliability. 4. Generate an ability to apply knowledge of Civil Engineering in the design of real life Civil engineering problems. 5. Built the necessary theoretical background for planning and estimation of different designed civil engineering structures.	a,b,c,d,e,f,g ,h,I,j,k,l

Course Code	**Course Title**	**Course Outcomes**	**POs**
Eighth Semester			
EOE-075	Solid Waste Management	1. Illustrate the waste generation in a technological society and analyze the waste generation trends. (Applying and analyzing) 2. Discuss the essential elements for solid	a,b,c,i,j

		waste management. (Understanding) 3. Propose a mathematical approach for handling waste on-site and off-site.(Creating) 4. Calculate the efficiencies of each collection system. (Evaluating) 5. Measure the actual volume of waste produced and reduced in terms of volume estimation.(Evaluating) 6. Calculate the actual amount of energy that can be recovered from waste.(Evaluating) 7. Designing an engineered landfill for waste produced from society. (Creating) 8. Illustrate the chemical processes involved during degradation of waste in landfill. (Applying) 9. Categorizing the various design parameters to be fulfilled while adopting composting process for waste treatment. (Analyzing)	
ECE-052	Analysis and Design of Hydraulic Structures	1. Use and integrate the fundamental and basic studied towards the goal of selecting,analysing and designing of hydraulic structures. 2. Cope with decision making and satisfy competing objectives. 3. Design,analyse and proof that the hydraulic structures is safe and economical. 4. Work in team and learn successful group interaction for a project. 5. Deliver an oral presentation for the project. 6. Perform studies of various hydraulic structures such as weir/barrages and bross-drainage works. 7. Classify the dams and spillways and know the functioning of each type. 8. Design stilling basin and identify the required type of energy dissipater.	a,b,c,d,e
ECE-062	River Engineering	1. To classify the type of rivers and its mechanics. 2. To realize the different river channel pattern and form. 3. To recognise the different river restoration structure, socio-cultural	a,c,e,i

		influences and ethics of river restoration. 4. To apply bio-engineering in river engineering. 5. An ability to design the river training structures as per area specific requirements.	
ECE-801	Construction Technology & Management	1. Able to understand how to control project schedule, cost, quality and risk. 2. Develop the ability to analyze the risk and feasibility of real state projects throughout their life cycle. 3. Students will be able to know the different types of equipments to be used in the construction projects. 4. Students will be able to know the different types of contracts in construction arbitration and legal aspects and its provision. 5. Students will be able to know various construction Equipments.	c,e,g,i
ECE-753	Project	1. To develop basic concept and principle of real life problems in Civil engineering 2. Understand the behaviour of simple and comples problems related with Civil Engineering. 3. Recognize and be able to apply fundamental principles to check the accuracy , safety and reliability. 4. Generate an ability to apply knowledge of Civil Engineering in the design of real life Civil engineering problems. 5. Built the necessary theoretical background for planning and estimation of different designed civil engineering structures.	a,b,c,d,e,f,g ,h,i,j,k,l

3.4. Industry interaction/internship (10)

(Give the details of industry involvement in the programme such as industry-attached laboratories and partial delivery of courses and internship opportunities for students)

Invited Lecture Organized:

1. DrPande B.B Lal Director General NIET Greater Noida delivered Special Lecture on "Formation of New University of Technology and Contribution of Civil Engineering to it" on 13/12/2013.
2. Dr H.R. Yadav General Manager (Metro) RVNL, New Delhi delivered Special Lecture on "Underground tunneling for construction of Metro_Its methods and Challenges" on 22/02/2014.

3. Sri V.K. Agnihotri, Member Engineering (Retd) Indian Railways, New Delhi delivered Special Lecture on "Railway Infrastructure need and future Prospects of Civil Engineering in Indian Railways" on 29/03/2014.
4. DrDevendra Mohan Prof and Head Civil Engineering IIT BHU delivered Special Lectures on "Floride in Ground Water: Recent Issues" and "Arsenic in ground water: Challenges and Remedial Measures" on 25/04/2014.
5. Dr R.K. Srivastava Prof Civil Engineering MNIT Allahabad delivered Special Lecture on "Contaminated Soil Problem-Health Risk Assessment and Remediation" on 08/08/2014.
6. DrVipul Sen, TDD, NRG, Bhabha Atomic Research Center, Mumbai delivered special lecture on "Environmental Concepts for Mega Cities" on Dec 01, 2014.
7. Er Rajesh Nitin, CeptaInfotechPvt Ltd., Lucknow delivered special lecture cum worshop on "AutoCad&StaadPro" on March 19, 2015.

Workshops

- Students of civil engineering stood winners in "Energy-efficiency Workshop" on Oil Conservation held during 22nd-24th August, 2015 organized by Petroleum Conservation Research Association.

Industrial Tour Details

Year	Date	Place of Visit	Description
2015-2016	Proposed	1.GIDA, Gorakhpur	1. Industrial Area
2014-2015	29th March, 2015	1.Birharghat, District-SantKabir Nagar 2. Mukhlispur	1.Bridge and River Training 2.Weir
2013-2014		1.Tanda, District-Basti 2. Mukhlispur	1.Bridge and River Training 2.Weir

List of students for industry internship 2013-2014

S.No.	Roll. No.	Name of students	Name Of Organization	Training Period
1	1004200001	Akanksha	DLW, Varanasi	5/7/2013 to 1/8/2013
2	1004200002	Akhil Singh	U.P. Jal Nigam, Agra	3/6/2013to 30/6/2013
3	1004200003	Amit Arya	NER , Gorakhpur	15/6/13 to 12/7/13
4	1004200004	Anandita Shukla	U.P. Jal Nigam, Agra	15/6/13 to 15/7/13
5	1004200005	Anoop Singh	NER , Gorakhpur	15/6/13 to 12/7/13
6	1004200006	Arjun Srivastava	U.P. Bridge Corporation, Gorakhpur	1/6/13 to 30/6/13
7	1004200007	Ashish kumar	Garrison Engg. Project	31/5/13 to 15/7/13
8	1004200008	Ashish Vishwakarma	NER , Gorakhpur	15/6/13 to 12/7/13
9	1004200009	Ashutosh Singh	NER , Gorakhpur	15/6/13 to 12/7/13
10	1004200011	Bhagirathi	NER, Gorakhpur	15/6/13 to 12/7/13
11	1004200013	Chandresh	NER , Gorakhpur	15/6/13 to 12/7/13

12	1004200014	Dharam Pal Saroj	NER , Gorakhpur	15/6/13 to 12/7/13
13	1004200015	Dinesh Kumar	PWD , Saharanpur	4/6/13 to 17/7/13
14	1004200016	DivyanshuTripathi	RVNL ,Lucknow	1/6/13 to 15/7/13
15	1004200017	Gaurav Kumar Yadav	NER , Gorakhpur	15/6/13 to 12/7/13
16	1004200018	Harsh	NER , Gorakhpur	15/6/13 to 12/7/13
17	1004200019	Himangi	DLW , Varanasi	5/7/13 to 1/8/13
18	1004200020	Himanshu Kumar	NER ,Gorakhpur	15/6/13 to 12/7/13
19	1004200021	Jai Prakash Yadav	NER , Gorakhpur	15/6/13 to 12/7/13
20	1004200022	Jitendra Kumar	NER , Gorakhpur	15/6/13 to 12/7/13
21	1004200023	Kikrusetua Solo	PWD , Dimapur	3 weeks
22	1004200024	Km. Kanchan Singh	UPRVUNL , Sonebhdra	17/6/13 to 17/7/13
23	1004200025	Kuldeep Singh	PWD , Hathras	1/6/13 to 30/6/13
24	1004200026	MadhurGoel	PWD , Gorakhpur	4 weeks
25	1004200027	Menguzelie Solo	PWD, Dimapur	3 weeks
26	1004200028	Merulingba Chang	PWD, Dimapur	3 weeks
27	1004200029	Mohd. Shariq	NER , Gorakhpur	15/6/13 to 12/7/13
28	1004200030	Ngoh M	PWD, Dimapur	3 weeks
29	1004200031	Pankj Kumar Dubey	Bridge Corporation ,Gorakhpur	1/6/13 to 30/6/13
30	1004200032	Pankj Kumar Gautam	NER , Gorakhpur	15/6/13 to 12/7/13
31	1004200033	Puneet Kumar	PWD ,Chandauli	1/6/13 to 30/6/13
32	1004200034	RaghavTripathi	RVNL, Lucknow	1/6/13 to 15/7/13
33	1004200035	Rahul Singh	RVNL, Lucknow	1/6/13 to 15/7/13
34	1004200037	Randhir Chauhan	NER , Gorakhpur	15/6/13 to 12/7/13
35	1004200038	Ravi Kumar Gautam	NER , Gorakhpur	15/6/13 to 12/7/13
36	1004200039	Rohit Kumar	NER , Gorakhpur	15/6/13 to 12/7/13
37	1004200040	Sachin Gupta	NER , Gorakhpur	15/6/13 to 12/7/13
38	1004200041	Sandeep kumarPrajapati	NER , Gorakhpur	15/6/13 to 12/7/13
39	1004200042	Santosh Kumar	PWD, Etava	4 weeks
40	1004200043	Saroj Kumar	NER , Gorakhpur	15/6/13 to 12/7/13
41	1004200044	Shailesh Dixit	NER , Gorakhpur	15/6/13 to 12/7/13
42	1004200045	Shalini	DMRC ,New Delhi	14/6/13 to 12/7/13
43	1004200046	Sharma HariBallabhDutt	PWD, Hathras	1/6/13 to 30/6/13
44	1004200047	Sher Singh	NER , Gorakhpur	15/6/13 to 12/7/13
45	1004200049	ShivaniKannojia	UPRVUNL, Sonebhdra	17/6/13 to 17/7/13
46	1004200050	Shuchi Mishra	PWD, Lucknow	7/6/13 to 5/7/13
47	1004200051	Snigdha Pandey	PWD, Lucknow	3/6/13 to 30/6/13
48	1004200053	Stuti	PWD , Ooreya	1/6/13 to 30/6/13
49	1004200054	Sundhanshu Mishra	NER , Gorakhpur	15/6/13 to 12/7/13
50	1004200055	Suiyipeube	PWD , Dimapur	3 weeks
51	1004200056	SurajVerma	NER , Gorakhpur	17/6/13 to 15/7/13
52	1004200058	TarushRanjan	RVNL, Lucknow	1/6/13 to 15/7/13
53	1004200059	Umesh Kumar	NER , Gorakhpur	15/6/13 to 12/7/13
54	1004200060	Vipin Pandey	NER , Gorakhpur	15/6/13 to 12/7/13
55	1004200061	Vipul Tiwari	PWD, Hathras	4 weeks
56	1004200062	Z MotsuthungKikong	PWD, Dimapur	3 weeks
57	1004210001	Abhishek Kumar Raj	PWD, Baharaich	6/6/13 to 5/7/13
58	1004210046	PratapBhan Singh	NER , Gorakhpur	15/6/13 to 12/7/13
59	1004210051	Rahul Saini	NER , Gorakhpur	15/6/13 to 12/7/13
60	1004220055	Surya Prakash Singh	NER , Gorakhpur	15/6/13 to 12/7/13
61	1004231046	Prateek Yadav	PWD, Bareily	1/6/13 to 30/6/13
62	1004231064	Suresh Singh	NER, Gorakhpur	15/6/13 to 12/7/13
63	1104200901	Anil Kumar	NER, Gorakhpur	15/6/13 to 12/7/13
64	1104200903	Sumit Kumar Chaturvedi	NER, Gorakhpur	15/6/13 to 12/7/13
65	1104200904	Vandana Chaudhary	PWD, Lucknow	3/6/13 to 1/7/13
66	1104200905	Vikash Kumar Chaurasia	NER, Gorakhpur	15/6/13 to 12/7/13
67	----------	Watisangma	PWD(H) , Kohima	3 weeks

List of students for industry internship 2014-2015

S.NO.	Roll No.	Name Of Students	Name Of Organization	Training Period
1	1004200010	Vanktesh Mani Tripathi	U.P. PWD CD-1 ,Siddharthnagar	01/06/2014 to 31/06/2014
2	1004200036	Ram SakalSahani	NER ,Gorakpur	01/06/2014 to 31/06/2014
3	1104200001	Abhinit Kumar	U.P. PWD Division no-2 Hardoi(Bilgram)	06/06/2014 to 04/07/2014
4	1104200002	Abhishek Bansal	PNC Infratech	24/05/2014 to 24/06/2014
5	1104200003	Abhishek Kumar Singh	NER, Gorakhpur	01/06/2014 to 30/06/2014
6	1104200004	Abhishek Singh Rawat	NTPC, DADRI	16/05/2014 to 17/06/2014
7	1104200005	Aditya Kumar Yadav	NER ,Gorakhpur	01/06/2014 to 30/06/2014
8	1104200006	Alberd	Nagaland PWD (HOUSING)	02/06/2014 to 30/06/2014
9	1104200007	AlokTripathi	NER ,Gorakhpur	01/06/2014 to 30/06/2014
10	1104200009	Amir Akhtar	NER, Gorakhpur	01/06/2014 to 30/06/2014
11	1104200010	Amit Saroj	NER ,Gorakhpur	01/06/2014 to 30/06/2014
12	1104200011	Anandita Agarwal	Delhi Technological University	11/06/2014 to 10/07/2014
13	1104200012	Ankit Chauhan	U.P. PWD MZN ,Muzaffarnagar	27/05/2014 to 28/06/2014
14	1104200013	Ankita Singh	Bridge Workshop NER ,Gorakhpur	02/06/2014 to 30/06/2014
15	1104200014	Anurag Yadav	NER ,Gorakhpur	01/06/2014 to 30/06/2014
16	1104200015	Ashish Kumar Singh	NHAI ,Kanpur	22may to20june14
17	1104200016	AshutoshPratap Singh	Bridge Workshop NER ,Gorakhpur	02/06/2014 to 30/06/2014
18	1104200017	Avnish Mishra	NER ,Gorakhpur	01/06/2014 to 30/06/2014
19	1104200018	Brihaspati Kumar Singh	Lucknow Division of northern railway assignia&vVIL	20/05/2014 to 05/07/2014
20	1104200020	Francis Gonmei	Nagaland PWD (HOUSING)	02/06/2014 to 30/06/2014
21	1104200021	Gaur Hari Tiwari	NHAI ,Kanpur	22/05/2014 to 21/06/2014
22	1104200022	Harshit Agarwal	ADA , Agara	01/06/2014 to 30/06/2014
24	1104200024	HimanshuKashyap	NTPC ,Shaktinagar	30/06/2014 to 29/07/2014
25	1104200025	HutokaliZhimo	Nagaland PWD (HOUSING)	02/06/2014 to 30/06/2014
26	1104200028	Kamal Kant Sharma	NTPC, Shaktinagar	30/06/2014 To 29/07/2014
27	1104200029	Kanika Agarwal	PWD ,KANPUR U.P.	05/06/2014 To 04/07/2014

28	1104200030	Kshitiz Chandra	PWD, Sitapur U.P.	02/06/2015 To 30/06/2014
29	1104200031	Lalit Kumar Saroj	UP PWD, Varanasi	04/06/2014 To 03/07/2014
30	1104200032	Lankonthung C Jami	Nagaland PWD (HOUSING)	02/06/2014 TO 30/06/2014
31	1104200033	Lichonthung Patton	Nagaland PWD (HOUSING)	02/06/2014 TO 30/06/2014
32	1104200034	Maheep Tiwari	PWD ,Lucknow	20/05/2014 To 20/06/2014
33	1104200035	Manish Kumar	LKO Division of NR	20may-5july014
34	1104200036	MetelenuTheyo	Nagaland PWD (HOUSING)	02/06/2014 TO 30/06/2014
35	1104200037	Mukeshkumar	NER BRIDGE WORKSHOP, GORAKHPUR	02/06/2014 TO 30/06/2014
36	1104200038	Nandini	NER BRIDGE WORKSHOP ,GORAKHPUR	02/06/2014 TO 30/06/2014
37	1104200040	Nidhitripathi	NER BRIDGE WORKSHOP ,GORAKHPUR	02/06/2014 TO 30/06/2014
38	1104200041	Nitin yadav	UP Rajkiyanirmannigametcwan,saifai	01/06/2014 To 28/06/2014
39	1104200042	Pooja rani	NER ,Gorakhpur	02/06/2014 TO 30/06/2014
40	1104200043	Preetisingh	NER, Gorakhpur	02/06/2014 TO 30/06/2014
41	1104200044	Prem pal	NER, Gorakhpur	02/06/2014 TO 30/06/2014
42	1104200046	Pushpendrayadav	NER ,Gorakhpur	02/06/2014 TO 30/06/2014
43	1104200047	Rahnumaahamadansari	UP PWD Lakhimpurkheri up	01/06/2014 To 28/06/2014
44	1104200048	Rahul kumar	NER, GKP	01/06/2014 To 01/07/2014
45	1104200049	Rahul rao	NER ,Gorakhpur	02/06/2014 TO 30/06/2014
46	1104200050	Rajatkumargupta	NER ,Gorakhpur	02/06/2014 TO 30/06/2014
47	1104200051	Rashmi	PWD ,KANPUR NAGAR	15/05/2014 To 14/06/2014
48	1104200052	Ritesh rai	NER BRIDGE WORKSHOP	02/06/2014

			,GORAKHPUR	TO 30/06/2014
49	1104200053	Sachintomer	NER BRIDGE WORKSHOP, GORAKHPUR	2june to 30june
50	1104200054	Sameer srivastava	UP STATE BRIDGE CORPORATION LTD	01/06/2014 TO 14/07/2014
51	1104200055	Santosh kumar	Up PWD ,AMBEDKARNAGAR	02/06/2014 TO 30/06/2014
52	1104200056	Shagun Krishna agarwal	UP STATE BRIDGE CORPORATION	01/06/2014 TO 30/06/2014
53	1104200058	Sharadsrivastava	UP STATE BRIDGE CORPORATION	01/06/2014 TO 30/06/2014
54	1104200059	Shashankkumar	EASTERN GANGA CANAL	19/05/2014 TO 18/06/2014
55	1104200060	Shivamtripathi	UP STATE BRIDGE CORPORATION	01/06/2014 TO 30/06/2014
56	1104200061	Sourabhshukla	UP STATE BRIDGE CORPORATION	01/06/2014 TO 30/06/2014
57	1104200062	Sujotgupta	UP RAJKIYA NIRMAN NIGAM	01/06/2014 TO 30/06/2014
58	1104200063	Swapnilchaturvedi	UP PWD, DEORIA	05/06/2014 TO 05/07/2014
59	1104200065	Vipinkumarpatel	NER ,GKP	02/06/2014 TO 30/06/2014
60	1104200066	Vivekmishra	NER ,GKP	02/06/2014 TO 30/06/2014
61	1104200067	Jitendrakumarsingh	UP PWD PRANTIYA KHAND, LAKHIMPUR KHERI	17/05/2014 TO 16/06/2014
62	1104210012	Apoorvsharma	NTPC ,SHAKTINAGAR	08/06/2014 TO 09/07/2014
63	1104210039	Rahul kumaryadav	NER, GKP	01/06/2014 TO 30/06/2014
64	1104210064	Vishal kumar	NER, GKP	02/06/2014 TO 30/06/2014
65	1104231021	Dinesh kumarverma	NER, GKP	2June to 30june14
66	1104231057	Shubhamsingh	NER, GKP	01/06/2014 TO 30/06/2014
67	1204200901	Bhartabhushandixit	Value intra group of companies	01/06/2014 TO 01/07/2014
68	1204200902	Chandankumar	Irrigation ,mirzapur	10/06/2014 TO

				09/07/2014
69	1204200904	krishna	Value intra group of companies	01/06/2014 TO 01/07/2014
70	1204200905	Manglaprasad	PWD CD3, ALLAHABAD	02/06/2014 TO 16/07/2014
71	1204200906	Manish kumarverma	PWD ,CHANDAULI	01/06/2014 TO 28/06/2014
72	1204200907	Pratistha pal	NER ,GKP	02/06/2014 TO 30/06/2014
73	1204200908	Pravinkumar	PWD CDL (TTZ), AGRA	01/06/2014 TO 14/07/2014
74	1204200909	Rahul kumarsharma	NER ,GKP	02/06/2014 TO 30/06/2014
75	1204200910	Ravi shekharvishwakarma	NER, GKP	01/06/2014 TO 30/06/2014
76	1204200911	Rupali pal	NER ,GKP	02/06/2014 TO 30/06/2014
77	1204200912	Vivekgupta	PWD CD3, ALLAHABAD	02/06/2014 TO 16/07/2014
78	1204200913	Pawankumarchaturvedi	Irrigation, mirzapur	10/06/2014 TO 09/07/2014
79	904200048	Vipothingo	Nagaland PWD (HOUSING)	02/06/2014 To 30/06/2014

In the department Civil Engineering more and more industry people are involved in the following ways:

a) At the inception of designing or imparting changes to programme curriculum industry people are involved as member of Board of Studies (BOS) which after successive deliberations imparts changes and improvements.
b) Experts from industries are invited in the department frequently to ensure continuous interaction of students and teachers with industry people, which includes even new entrepreneurs to come forward and discuss their social, technical and technical ways to reach to the position.
c) Experts are also invited for project exams as external examiner to discuss further the usefulness of project.

3.5. Curriculum Development (15)

3.5.1. State the process for designing the programme curriculum (5)

(Describe the process that periodically documents and demonstrates how the programme curriculum is evolved considering the PEOs and the POs)

- The apex body which is responsible for designing programme curriculum is **Board of Studies (BOS)** of Civil Engineering.
- All regular faculty members of the department are members of BOS and BOS

also has external expert members from different industry and faculties from other renowned institutions.

- Department also ensures the informal participation of students in development of curriculum for making an assessment of their perception about different courses.
- The PEO's serves as a base to articulate PO's and further these serve as the main point for designing the curriculum with valuable inputs from other external members.
- It is the course coordinator to whom the responsibility is assigned to design the course curriculum and include the aspirations of all the stakeholders to give a best possible course which matches the PO's at a high level.
- The members of **Department Advisory Group** go through the whole course curriculum and suggest possible changes in lieu of the on-going technical changes in the society.
- The course after finalization by course coordinator and Department Advisory Group is presented to BOS which is thoroughly discussed and reviewed by experts with stress to include technical changes and modifications happening in real life world.
- The syllabus then is finalized by the Academic Council with proper formatting and structured documentation of whole curriculum in coherence with the curriculum of other courses in the University.

3.5.2. Illustrate the measures and processes used to improve courses and curriculum (10)

(Articulate the process involved in identifying the requirements for improvements in courses and curriculum and provide the evidence of continuous improvement of courses and curriculum)

The measures and processes used to improve courses and curriculum are on a regular basis, the procedure adopted is mentioned here forth step to step:

- In the first stage faculty members of various specializations are grouped together and course coordinators for each group is nominated to prepare the course structure and course structure is put forth in the departmental meetings.
- The course which is designed by respective groups after several rounds of discussions is continuously upgraded by successful participation of stakeholders in the discussions.
- The feedbacks from present students and passing graduates to get their inputs from different perspective helps to judge the level of PO's attained and the areas to be improved in the curriculum.
- Interaction of faculty with external world i.e. people from different organisations, industries and emerging groups of innovation plays a key role in including the latest technology in each course.
- Internal stakeholders which primarily are the students express their views

in meetings with faculty and a constant process is followed to fill the feedback and the filled feedback is reviewed to the degree of imparting useful conclusions derived after analysis.

- The faculty members are in constant touch with outside organizations by doing consultancy for them and hence are always upgraded with new demands of the hour on grounds of technology, this helps in imparting successful advanced changes to the programme curriculum.
- The exams conducted at state and national level viz. IES and GATE, UPPSC and their syllabus for exam serves as a consolidate base to improve the curriculum.
- Not only the changes in existing syllabus but also the introduction of new courses realizing the need of technical society is an important part of programme curriculum improvement.
- It is the free will of course coordinator to come up with good changes in the curriculum and same can be approved by successful deliberation in BOS.
- All the details of meetings which include the changes in form of introduction of new courses or imparting changes are well documented in form of minutes of the meeting.

3.6. Course Syllabi (5)

(Include, in appendix, a syllabus for each course used. Syllabi format should be consistent and shouldn't exceed two pages.)

The syllabi format may include:

- Department, course number, and title of course
- Designation as a required or elective course
- Pre-requisites
- Contact hours and type of course (lecture, tutorial, seminar, project etc.,.)
- Course Assessment methods(both continuous and semester-end assessment)
- Course outcomes
- Topics covered
- Text books, and/or reference material

IV. Student's Performance (75)

Admission intake in the programme

Item	CAY	CAY*m*1	CAY*m*2	CAY*m*3
Sanctioned intake strength in the programme (*N*)	120*	60*	60*	60*
Total number of admitted students in first year *minus* number of students migrated to other programmes at the end of 1st year (*N*1)		62	70	67
Number of admitted students in 2nd year in the same batch via lateral entry (*N*2)		19	10	12
Total number of admitted students in the programme (*N*1 + *N*2)		81	80	79

* Excluding supernumerary seats

4.1. Success Rate (20)

Provide data for the past seven batches of students

Years of entry (in reverse chronological order)	Number of Students admitted in 1st yr. + admitted via lateral entry in 2nd yr. (N1+N2)	Number of Students who have successfully completed*			
		1st year	2nd year	3rd year	4th year
CAY	120				
CAYm1	81	43			
CAYm2	80	43	68		
CAYm3	79	48	66	72	
CAYm4(LYG)	76	47	61	73	76
CAYm5(LYGm1)	72	35	60	63	69
CAYm6(LYGm2)	58	44	41	53	57
CAYm7(LYGm3)	60	48	50	46	56

*successfully completed implies zero backlogs
Success rate = 20 × mean of success index (SI) for past three batches

SI = (Number of students who graduated from the programme in the stipulated period of course duration)/(Number of students admitted in the first year of that batch and admitted in 2nd year via lateral entry)

Item	LYG (CAY*m*4)	LYG*m*1 (CAY*m*5)	LYG*m*2 (CAY*m*6)
Number of students admitted in the corresponding First Year + admitted via lateral entry in 2nd year	76	72	58
Number of students who have graduated in the stipulated period	76	69	57
Success index (SI)	1.00	0.96	0.98

Average SI = 0.98
Success rate = 20 × Average SI = 19.60

4.2. Academic Performance (20)

Academic Performance = 2 * API
Where API = Academic Performance Index
=Mean of Cumulative Grade Point Average of all successful Students on a 10 point CGPA System
OR
=Mean of Percentage of marks of all successful students/10

Item	LYG (CAYm4)	LYGm1 (CAYm5)	LYGm2 (CAYm6)	LYGm3 (CAYm7)
Approximating the API by the following mid-point analysis				
Total No. of Students between Percentage Range	78	72	57	59
91-100	0	0	0	0
81-90	9	7	10	5
71-80	41	39	32	36
61-70	26	24	15	17
51-60	2	2	0	1
41-50	0	0	0	0
31-40	0	0	0	0
below 30	0	0	0	0
Mean of Percentage of all the students	72.31	72.08	74.12	72.63

Average API = 7.28
Academic Performance = 2 x Av. API = 14.56

4.3. Placement and Higher Studies (20)

Assessment Points = 20 × (x + 1.25y)/N

where, x = Number of students placed
y = Number of students admitted for higher studies with valid qualifying scores/ranks, and
N = Total number of students who were admitted in the batch including lateral entry subject to maximum assessment points = 20.

Item	LYG	LYG*m*1	LYG*m*2
Number of admitted students corresponding to LYG including lateral entry (*N*)	76	72	58
Number of students who obtained jobs as per the record of placement office (*x*1)	0	1	12
Number of students who found employment otherwise at the end of the final year (*x*2)	4	7	5
x = *x*1 + *x*2	4	8	17
Number of students who opted for higher studies with valid qualifying scores/ranks (*y*)	72	59	40
Assessment points	24.74	22.71	23.10

Average assessment points = 23.52

4.4 *Professional Activities (15)*

4.4.1 Professional societies / chapters and organising engineering events (3)

(Instruction: The institution may provide data for past three years).

There is an Association of Civil Engineers (ACE) in the Civil Engineering Department of which teachers and students are members. The Association is completely managed by B.Tech students of Civil Engineering. The Association organizes several technical, cultural events like:

- **Avalamban**: A University level technical fest is organized by students of civil engineering.
- **ISTE:** University is a member of Student Chapter of ISTE
- **Freshers:** Organized by Civil Engineeering students to welcome the new batch in the department.
- **Farewell:** Organized by the students of the department to bid adieu to the passing batch.
- **Engineers Day**
- **Special talk by experts**

4.4.2 Organisation of paper contests, design contests, etc. and achievements (3)

(Instruction: The institution may provide data for past three years).

Achievements of 2015-16 Batch

ROLL NO	NAME	PRIZE
1204200001	ABHIJEET SINGH	1. Winner of Treasure Hunt in AVALAMBAN'14 organized by ACE. 2. Runner up in Laser Strike, organised by Robotics Club.
1204200003	AHMAD RASHIQ	1. Winner of grammar quiz organised by ECES society 2. Runner up LAN gaming (Counter Strike 1.6) in Techsrijan 2014 3. Runner up LAN gaming (Counter Strike 1.6) in Utkarsh 2015 organised by BBD university, Lucknow. 4. Winner LAN gaming in Ennexus 2015
1204200004	AKASH SINGH	1.3rd prize in Castle Mania 2.Participated in "Kashiyatra" in IIT BHU in culturals 3.1st prize in Lan Gaming 4.Summer Intern In NTPC Tanda , Workshop un Civil Simplified on " Structural and Foundational Analysis and won won "Best Bridge Design " award.
1204200008	AMIT SINGH	runner up in BRIDGEKRITI
1204200011	ANKIT KUMAR	1. Runner up LAN gaming (Counter Strike 1.6) in Techsrijan 2014 2. Runner up LAN gaming (Counter Strike 1.6) in Utkarsh 2015 organised by BBD university, Lucknow. 3. Winner LAN gaming in Ennexus 2015
1204200016	ASTHA SINGH	Third prize in soch in avalambam 2013
1204200018	AYUSHI TULSYAN	3rd prize in soch
1204200020	BHUMIKA SADHWANI	1.Runner up in electronic arts 2.First position in electronic arts 3.Consolation prize in painting organised by Mahatma Gandhi Post Graduate College,Gorakhpur
1204200024	DIGVIJAY SINGH	Winner of Treasure Hunt in AVALAMBAN'14 organized by ACE.
1204200026	DIVYA KAUSHAL	3rd position in ad mad show in infotania 2013
1204200027	GAURAV KUMAR MAURAYA	First prize winner of Labyrinth (An event for GK quiz and treasure hunt)

1204200029	HARSH SHARMA	Winner of Treasure Hunt in AVALAMBAN'14 organized by ACE.
1204200031	JEEVESH PRATAP SINGH	First Position in Ad-Mad , Infotania (Mechanical Engineering Fest)
1204200034	KHRUVELU	First position in Electronic Arts, Robomania
1204200037	NIKITA	3rd price in castlmania Best bridge design Award,CIVIL SIMPLIFIED
1204200038	NITESH KUMAR	Best bridge design Award,CIVIL SIMPLIFIED
1204200041	PRADEEP	Second prize winner in bridgekriti AVALAMBAN 2014
1204200042	PRADEEP MISHRA	1. 3rd prize winner in wireless robotics in Techsrijan'12 organised by IEEE & SAE. 2.1st prize winner in KYC in ELECTRA 2014 3.1st prize winner in KYC in ELECTRA in 2015
1204200043	PRATIBHA VISHWAKARMA	Third position in Techprastuti 2013 First position in Techprastuti 2014
1204200046	RAJAT JAIN	3rd position in ad mad show in infotania2013
1204200047	RANDHER SINGH	3rd position in ad mad show in infotania 2013
1204200048	RANVIJAY SINGH	1. 3rd position in ad mad show in infotania 2013
1204200049	RASHID AHMED	1-Wireless Robotics(techsrijan`12) -3rd position
1204200052	SAURABH DUBEY	3rd prize in QUIZMOZZ(Infotania) 2nd prize in Quiz(Avalamban)
1204200053	SAURABH YADAV	1.BRIDGE KRITI runner up 2.VENTURA winner(Techsrijan)
1204200064	VIVEK KUMAR	1st prize in wired ROBOTICS
1204200066	VIVEK KUMAR GUPTA	1. Winner of wired and wireless robotics of Techsrijan 2. Runner up TECHNEETI (a quiz competition) organised by IEEE & SAE India. 3. Winner of Treasure Hunt in AVALAMBAN'14 organized by ACE. 4.Winner of Bizgyyaan (a quiz based on bussiness) organised by IEEE & SAE India.
1204231009	ADARSH KUMAR CHAUDHARY	1) Runner up of a quiz competition based on VHDL. 2) Winner of Soch (a paper presentation competition) in AVALAMBAN'14 organised by ACE. 3) Winner of KYC (a quiz competition) organised by EEL (Electrical Engineers' Ligation). 4) Winner of Techprastuti (a paper presentation competiton) in Techsrijan (University Techfest). 5) Winner of KYC (a quiz competition) organised by EEL (Electrical Engineers' Ligation).
1204200023	DEEPIKA VARUN	First prize in the event "collage making",Udgaar'15

1204200027	GAURAV KUMAR MAURAYA	Second position in face painting competition
1204200032	KAVITA SINGH CHAUHAN	Third Prize in event 'Tattoo Making' of UDGAAR'15.
1204200034	KHRUVELU	1. First position in Story- writing (Udgaar'14) 2. First position in Face painting (Udgaar'14)
1204200037	NIKITA	1.First position in Kamli hunt, Abhivyakti
1204200056	SHEENA GARG	Second position in face painting competition
1204200058	SHWETA GUPTA	Ist prize in collage making in UDGAAR'15
130110209	RASHMI DWIVEDI	First prize winner in Rangoli event organised by UDGAAR'14

4.4.3 Publication of technical magazines, newsletters, etc. (3)
(Instruction: The institution may list the publications m e n t i o n e d e a r l i e r along with the names of the editors, publishers, etc.).

A wall magazine named **"SHILP SANDESH"** is published by B.Tech Civil Engineering students which includes articles on technical realm, information of the department and activities carried out round the month.

4.4.4 Entrepreneurship initiatives, product designs, and innovations (3)
(Instruction: The institution may specify the efforts and achievements.)

Programmes conducted by Entrepreneurship Development Cell

Seminar-1 held on 24 August 2015	
Entrepreneurship Development Seminar	
Invitees	**Association**
Ms. AnkitaDwivedi	Executive Director, The Indus Entrepreneurs (TiE) UP Chapter
Prof. Shashikant Dixit	Dr. Gaur HariSinghania Institute of Management & Research (GHS-IMR)
Prof. Puneet Rai	Dr. Gaur HariSinghania Institute of Management & Research (GHS-IMR)

List of students attended the seminar on Entrepreneurship Development

Computer Science And Engineering	**Civil Engineering**	**Electrical Engineering**	**Mechanical Engineering**	**Electronics And Communication Engineering**
Shubham Singh	Ajit Sharma	Vishal Yadav	Sanjiv Kumar Mall	Ayush Kumar
Anurag Pandey	Shivam Tiwari	Ankur Kumar	Mohammad Sultan	Prince Yadav
Rahul Rakesh Vaishya	Siddharth Jain	Sudeep Patel	Aashish Kumar Dubey	Abhishek Pratap Singh
Nitin	Saurabh Verma	Manish Kumar	Shivangi Singh	Prince Kumar

Ayushi	Rajeshwar Gupta	Rajat	Shruti Nayak	Divyansh Singh
Payal Singh	Prem Prakash Sagar	Mihir Goel	Jigyasha Srivastava	Shubham Gupta
Neha Gond	Shivendra Kumar	Rajat Kumar	Shweta Maddheshiya	Abhishek Chauhan
Sandhya Gupta	Akash Deep	Shitanshu Singh	Ojaswi Kam	Amit
Saima Imtiyaz	Ashutosh Shukla	Rishabh Kumar Singh	Archna	Javed Alam
Deepika	Sayant Thakur	Uady Pratap Singh	Shatakshi Dubey	Ankit
Neelam	Nitish Kumar Jaiswal	Sudeep Patel	Rajeshwari Gautam	Shivendra Kumar
Sonal	Shristi Singh	Saddam Hussain	Ritesh Kumar Singh	Sharad Yadav
Anshima	Rivi Srivastava	Manish Kumar	Anurag Yadav	Utkarsh Sharma
Aruni	Aditi Singh	Nitin Verma	Kaushal Kumar	Kaushik Singh
Vartika	Pallavi Singh	Ankin	Shiv Sharma	Ayush Sharma
Arushi	Ankita Singh	Himanshu Verma		Abhinav
Muskan	Praveen Kumar	Saurabh Joshi		Shubham Kumar
Sandhya Saroj	Akhil Kumar	Rishu Raj Jaiswal		Ankur Kushwaha
Pooja Rai	Krishna	Nishi Sharma		Jaibrat
Preeti Yadav	Pranjal Singh	Shivam Kumar		Chandra Shikar
Shikha Gupta	Kshitij Agrawal	Vishal Yadav		Ankur
Saroj	Ankit Kumar	Ramendra		Abhishek Verma
Kirti	Abhishel Kumar	Shiv Shankar		Abhinav Pandey
Harsha Priya	Neeraj Singh	Yatharth		Abhinav Mauraya
Nandita Pandey	Rishabh Singh	Anand		Anuska Shukla
Krati Tiwari	Praveen Chandra	Shubham Pathak		Kajal Ahitwar
Shreya Mishra	Vinit Tyagi	Sandeep Kumar		Abha Tiwari
Namrata Gaur	Siddharth Pandey	Ajay Singh		Shivangi Shukla
Komal		Pranika		Aarushi Singh
Balak Ram Yadav		Kanchan Kumari		Mamta
Manas Yadav		Pushplata		Aishwarya Singh
Nitin Singh		Richa Pandey		Roopam Chauhan
		Pooja Chauhan		Sonam Chuhan
		Laxmi Jaiswal		Aakansha
		Niharika		Juhi Kushwaha
		Aastha Singh		Saumya Bhandari
				Shristi

				Lalchandani
				Shreya Mishra
				Vidisha Yadav
				Shreya Kesari
				Medha Shukla
				Komal Gupta
				Nihita Singh
				Shruti Pandey
				Ritik Goel

4.4.5 Publications and awards in inter-institute events by students of the programme of study (3)

(Instruction: The institution may provide a table indicating those publications, which fetched awards to students in the events/conferences organised by other institutes. A tabulated list of all other student publications may be included in the appendix.)

- Ahmad Rashiq and Ankit Kumar stood runner up in LAN gaming (Counterstike 1.6) in 'UTKARSH' '14 organized by BBD University Lucknow.
- Shivani Srivastava stood runner up in singing competition at Jaypee University of Engineering and Technology, Guna in 2014

V. Faculty Contributions (175)

List of Faculty Members: Exclusively for the Programme / Shared with other Programmes (Instruction: The institution may complete this table for the calculation of the student-teacher ratio (STR). Teaching loads of the faculty member contributing to only undergraduate programme (2nd, 3rd, and 4th year) are considered to calculate the STR.)

Name of the Faculty	Qualification University and year of graduation	Designation and Date of Joining the Institution	Distribution of teaching load (%)			Number of research publications in journals and conferences since joining	IPRs	R & D and Consul-tancy work with amount	Holding an incuba-tion unit	Inter-action with outside world
			1st Y	UG	PG					
Dr . S.M. Ali Jawaid	Ph.D. 2007 D.D.U. Gorakhpur	Prof. 05-10-91	0	70	30	J = 27 C =47	Nil	Refer Below	No	Refer Below
Dr. J. B. Singh	Ph.D 1973 BHU, Varanasi	Prof Emeritus 30.03.74	-	-	-	J = 13 C = 05	Nil		No	
Dr. R.K. Shukla	Ph.D. 2001Univ of Nottingham	Asso. Prof. 28-01-88	0	100	0	J = 05 C = 12	Nil		No	
Dr. Shri Ram	Ph.D.2006 D.D.U. Gorakhpur	Asso. Prof. 21-01-89	0	78	22	J = 14 C = 44	Nil		No	
Shri Ram Dular	M.Tech88 I I T Kharagpur	Asso. Prof. 25-01-88	0	47	53		Nil		No	
Shri S.N. Choudhary	M.E. 1988 Univ. of Gorakhpur	Asso. Prof. 20-08-88	0	79	21	J=02 C=05	Nil		No	
Dr. Govind Pandey	Ph.D.2002 IIT Roorkee	Asso. Prof. 04-10-91	0	47	53	J = 34 C =27	Nil		No	
Dr.Arun Kumar Mishra	Ph.D. 2014 Mumbai University	Asstt Prof. 30-7-2009	0	74	26	J = 10	Nil		No	
Shri. Dilip Kumar	M.Tech. 07 IT BHU	Asstt Prof. 09-7-2009	-	-	-	J =25 C = 3	Nil		No	

Ms.Sana Zafar	M.Tech. 14 I.I.T, Delhi	Asstt Prof. 22-12-2014	0	65	35	J = 2				
Ms. Sunayana	M.Tech.14 I.I.T,Kanpur	Asstt Prof. 26-12-2014	38	43	19					
Mr.VinayKr.Singh	M.Tech.14 D.T.U	Asstt Prof. 31-08-2015	0	100	0		Nil		No	
Mrs. Sneha Gupta	M.tech.13 M.N.I.T Alahabad	Asstt Prof. 01-09-2015	36	45	19	J =2 C=3				
Mr.Kshitij Kr. Yadav	M.Tech. 11 IIT Kanpur	Asstt Prof. 18-09-2015	39	61	0					
		Total				**J = 134 C =146**				

S.no.	**Name of Faculty**	**Designation**	**Qualification**	**Session of Contract**
1	Ankit Kumar Singh	Contractual Faculty	B.Tech	2012-13
2	Dr. J.B.Singh	Professor	Ph.D	2012-13
3	Saumya Srivastava	Contractual Faculty	B.Tech	2012-13
4	VartikaTripathi	Contractual Faculty	B.Tech	2012-13
5	Vivek Kumar Gupta	Contractual Faculty	B.Tech	2012-13
6	Suneeti Mishra	Contractual Faculty	B.Tech	2012-13
7	Abhishek Singh	Contractual Faculty	B.Tech	2013-14
8	Amit Chaubey	Contractual Faculty	B.Tech	2013-14
9	Amit Kumar Singh	Contractual Faculty	B.Tech	2013-14
10	Arun Kumar	Contractual Faculty	B.Tech	2013-14
11	Janak Singh Yadav	Contractual Faculty	B.Tech	2013-14
12	KamleshTripathi	Contractual Faculty	B.Tech	2013-14
13	NimishaDwivedi	Contractual Faculty	B.Tech	2013-14
14	Sandeep Singh	Contractual Faculty	B.Tech	2013-14

15	Shravan Kumar Jaiswal	Contractual Faculty	B.Tech	2013-15
16	Dr.B.B.Mishra	Professor	Ph.D	2013-15
17	HeeraLal Yadav	Contractual Faculty	B.Tech	2014-15
18	Mohd. Tasleem	Contractual Faculty	M.tech	2014-15
19	Pankaj Kumar Dubey	Contractual Faculty	B.Tech	2014-15
20	Sana Zafar	Contractual Faculty	M.tech	2014-15
21	Sher Singh	Contractual Faculty	B.Tech	2013-15
22	Shashank Singh	Contractual Faculty	B.Tech	2014-15
23	Mrinanak Pandey	Contractual Faculty	M.tech	2014-16
24	Dinesh Kumar Patel	Contractual Faculty	B.Tech	2015-16
25	Md. Shariq	Contractual Faculty	B.Tech	2015-16
26	Pramendra Kumar	Contractual Faculty	B.Tech	2015-16
27	Rajesh Kumar Bharti	Contractual Faculty	B.Tech	2015-16
28	ShipraChaubey	Contractual Faculty	M.tech	2015-16
29	StutiMaurya	Contractual Faculty	M.tech	2015-16
30	VijendraPratapDheeraj	Contractual Faculty	B.Tech	2015-16
31	Yashwant Kumar Gupta	Contractual Faculty	B.Tech	2015-16

5.1 Student-Teacher Ratio (STR) (20)

STR is desired to be 15 or superior

Assessment = 20 × 15/STR; subject to maximum assessment of 20
STR = (x + y + z)/N1
where,
x = Number of students in 2nd year of the programme

y = Number of students in 3rd year of the programme
z = Number of students in 4th year of the programme
N1 = Total number of faculty members in the programme (by considering fractional load)

Year	***x***	***y***	***Z***	***x + y + z***	***N*1**	**STR**	**Assessment (max. = 20)**
CAY*m*2	79	78	69	226	18.08	12.50	20

CAY*m*1	80	78	79	237	16.55	14.32	20
CAY	81	79	77	237	15.98	14.83	20
Average assessment							20

For Item nos. 5.2 to 5. 8, the denominator term (N) is computed as follows:

N = Maximum {N1, N2}
N1 = Total number of faculty members in the programme (considering the fractional load)
N2 = Number of faculty positions needed for student-teacher ratio of 15.

Year	***N*1**	***N*2**	***N* = Max. (*N*1, *N*2)**
CAY*m*2	18.08	15	18
CAY*m*1	16.55	16	16.55
CAY	15.98	16	16

5.2 Faculty Cadre Ratio (20)

Assessment = 20 × CRI
where, CRI = Cadre ratio index
= 2.25 × (2x + y)/N; subject to max. CRI = 1.0
where,
x = Number of professors in the programme
y = Number of associate professors in the programme

Year	***x***	***y***	***N***	**CRI**	**Assessment**
CAY*m*2	1	6	18	1.0	20
CAY*m*1	2	5	16.55	1.0	20
CAY	1	5	16	1.0	20
Average assessment					20

***5.3 Faculty Qualifications (30*)**

Assessment = 3 × FQI

where, FQI = Faculty qualification index
= (10x + 6y + 2z0)/N2
such that, x + y +z0≤N2; and z0≤z

Faculty	Specialization of Faculty Member	Subject	Credits/Type	Objective
Ms.Sana Zafar	Rock Mechanics	Engineering Geology	3/Engineering Fundamentals	A clear understanding of rocks and their minerals. A

	and Underground Structures	& Building Materials		clear understanding of properties of building materials like cement, aggregates, concrete, limeand bricks
Mr.Ravi Kumar Gupta	NET	Industrial Management	3/Management Fundamentals	Pursue professional positions in industry and/or graduate study programs in their areas of interest. Contribute to the body of knowledge in their professional discipline through problem-solving, discovery, leadership, and responsible application of technology Continue to develop both professionally and personally through activities such as participation in professional societies, continuing education, and community service
Ms.NiveditaChaturvedi	MBA	Entrepreneurship Development	4/Management Fundamentals	
1.Dr.Harish Chandra	Ph.D	Engineering Mathematics	4+4+4/Basic Science	Use of various mathematical techniques such as differential operators, matrix algebra and vector differentiation and integration for solving their realistic engineering problems.
2.Dr.Amit K.Barnwal	Ph.D			
1.Dr.B.K.Pandey	Ph.D	Engineering Physics	5+5/Basic Science	Assimilation of all concepts to solve real life problem pertaining to classical and quantum physics.
2.Dr.S.P.Singh	Ph.D			
1.Dr.P.P.Pande	Ph.D	Engineering Chemistry	5/Basic science	Students will acquire basic knowledge in Engineering Chemistry, which allows students to gain qualitative and quantitative skills.

where, x = Number of faculty members with PhD

y = Number of faculty members with ME/ M Tech

z = Number of faculty members with B.E/B.Tech

	x	**y**	**Z**	**N**	**FQI**	**Assessment**

CAYm2	6	3	9	18	6.70	20.09
CAYm1	7	6	5	16.55	6.50	19.49
CAY	6	5	7	16	6.63	19.88
Average Assessment						19.82

5.4.Faculty Competencies correlation to Programme Specific Criteria (15)

(Provide evidence that program curriculum satisfies the applicable programme criteria specified by the appropriate American professional associations such as ASME, IEEE and ACM. You may list the programme specific criteria and the competencies (specialisation, research publication, course developments, etc.,) of faculty to correlate the programme specific criteria and competencies)

Annexure E

5.5 Faculty as participants/resource persons in faculty development/training activities(15)

(Instruction: A faculty member scores maximum five points for a participation/resource person.)

Participant/resource person in two week faculty development programme: 5 points
Participant/resource person in one week faculty development programme: 3 Points

Name of the faculty	max. 5 per faculty		
	CAYm2	**CAYm1**	**CAY**
Dr . S.M. Ali Jawaid	5	5	
Dr. R.K. Shukla	5	5	5
Dr. Shri Ram	5	5	
Shri Ram Dular	5	5	
Shri S.N. Choudhary	5	5	
Dr. Govind Pandey	5	5	5
Dr.Arun Kumar Mishra	5	5	
Mr.Dilip Kumar	5	5	
Ms.Sana Zafar		3	
Ms. Sunayana		3	
N (Number of faculty positions required for an STR	15	16	16
Assessment = 3 × Sum/*N*	8.00	8.63	1.88
Average Assessment			6.17

5.6. Faculty Retention (15)

Assessment = 3 × RPI/N
where RPI = Retention point index
= Points assigned to allfaculty members
where points assigned to a faculty member = 1 point for each year of experience at the institute but not exceeding 5.

Item	CAYm2	CAYm1	CAY
Number of faculty members with experience of less than 1 year (x_o)	7	7	8
Number of faculty with 1 to 2 year experience (x_1)	0	2	3
Number of faculty with 2 to 3 year experience(x_2)	0	0	0
Number of faculty with 3 to 4 year experience(x_3)	1	0	0
Number of faculty with 4 to 5 year experience(x_4)	0	1	0
Number of faculty with more than 5 years experience(x_5)	10	8	7
N	18	18	18
RPI = $x_1 + 2x_2 + 3x_3 + 4x_4 + 5x_5$	53	46	38
Assessment	8.83	7.67	6.33
Av. Assessment			7.61

5.7.Faculty Research Publications (FRP) (20)

Assessment of FRP = 4 × (Sum of the research publication points scored by each faculty member)/N
(Instruction: A faculty member scores maximum five research publication points depending upon the quality of the research papers and books published in the past three years.)

The research papers considered are those (i) which can be located on Internet and/or are included in hard-copy volumes/proceedings, published by reputed publishers, and (ii) the faculty member's affiliation, in the published papers/books, is of the current institution.

Include a list of all such publications and IPRs along with details of DOI, publisher, month/year, etc.

Name of the faculty (contributing to FRP)	FRP Points (max. 5 per faculty)		
	CAYm2	CAYm1	CAY
Dr. S.M. Ali Jawaid	5	5	
Dr. R.K. Shukla	5		
Dr. Shri Ram	5		

Shri Ram Dular	5		
Shri S.N. Choudhary	5		
Dr. Govind Pandey	5	5	
Dr.Arun Kumar Mishra	5	5	
Mr.Dilip Kumar	5	5	
Ms.Sana Zafar		5	
N(Number of faculty positions required for an STR)	15	16	16
Assessment = 4 x Sum/N	10.67	6.25	0.00
Average Assessment			5.64

List of Publications of Dr. S. M. Ali Jawaid

International Journal

(a) Self/ Main Author:

1. **Jawaid, S. M. A.** and Madhav, M. R. (2003). **"ANALYSIS OF SHORT RIGID CAISSONS WITH GRANULAR CORE FOR ALLUVIAL LOWLANDS",** Intl. Journal of lowland Technology, ISSN :1344-9656**,** Vol. 5(2), pp. 1 – 9.

2. **Jawaid, S. M. A.** and Raghatate, S. (2007). **"BAGASSE ASH UTILIZATION IN BUILDING INDUSTRY",** Journal of Solid Waste Technology and Management, ISSN: 1088-1697, Vol. 33, No. 4, Nov 2007, pp. 23-30.

3. **Jawaid, S. M. A.** and Madhav, M. R. (2008)."**BEHAVIOUR OF COMPOSITE RIGID CAISSON FOUNDATION**", Geotechnical Engineering - Journal of the Southeast Asian Geotechnical Society, Bangkok, ISSN 0046-5828, Vol.3, pp. 50-56..

4. **Jawaid, S. M. A.** and Madhav, M. R. (2008). **"INNOVATIVE FOUNDATION FOR ALLUVIAL DEPOSITS**", International Journal of Geotechnical Engineering, Ross Publications, ISSN 1938-6362, October 2008, Vol. 2, No .4, pp. 455-462.

5. **Jawaid, S. M. A.** and Madhav, M. R. (2009)."**ANALYSIS OF RIGID SHORT CAISSON WITH GRANULAR CORE INCORPORATING NONLINEAR INTERFACE AND BASE RESPONSES**", Geotechnical and Geological Engineering Journal, Springers, Netherland , ISSN: 0960-3182, No. 27, pp. 391-406.

6. **Jawaid, S. M. A**.(2010). **"CRITICAL REVIEW OF SEISMIC HAZARD EVALUATION USING INDIAN STANDARD SPT DATA",** International Journal of Earth Sciences and Engineering, ISSN: 0974-5904, Vol. 3, N0.01 SPL, pp. 12-15.

7 **Jawaid, S. M. A**.(2010). **"RICE HUSK ASH - LIME BLENDED BUILDING BRICKS",** International Journal of Earth Sciences and Engineering, ISSN: 0974-5904, Vol. 3, N0. 02, pp. 301-308.

8 **Jawaid, S. M. A**. and Madhav, M. R. (2011). **"ULTIMATE LATERAL CAPACITY OF SHORT RIGID CAISSON IN SOFT CLAY INCORPORATING BASE SHEAR",** International Journal of Geotechnical Engineering, Ross Publications, ISSN 1938-6362 , October 2011, Vol. 5, No .4, pp. 457-461.

9 **Jawaid, S. M. A**. and Madhav, M. R.. (2013) **"ANALYSIS OF AXIALLY LOADED COMPOSITE RIGID SHORT CAISSON FOUNDATION BASED ON CONTINUUM APPROACH",** Intl J of Geomechanics, ASCE , ISSN: 1532-3641, Oct, Vol. 13, No. 5, pp. 636-644.

(b) <u>With Students</u>

10 Kumar, S. and **Jawaid, S M Ali (2013) "ENVIRONMENTAL IMPACT OF PAPER INDUSTRY"** Intl J of Biological Sciences & Technological Research (IJBSTR), ISSN 2320-6020, June, Vol. 1, No.6, pp. 25-28.

11 Khan, A. H.. and **Jawaid, S M Ali (2013) "STABILIZATION OF INCINERATED HOSPITAL WASTE USING DIFFERENT TYPES OF BINDERS: A REVIEW"** Intl J of Biological Sciences & Technological Research (IJBSTR), ISSN 2320-6020, Aug, Vol. 1, No.8, pp. 14-17.

12 Tripathi, B. and **Jawaid, S M Ali (2013) "STABILIZATION/SOLIDIFICATION AND MICRO-STRUCTURAL ANALYSIS OF POND ASH USING LIME- "** Intl J of Biological Sciences & Technological Research (IJBSTR), ISSN 2320-6020, Aug, Vol. 1, No.8, pp. 22-25.

13 Lata, K. and **Jawaid, S M Ali (2013) "UTILIZATION OF SUGAR CANE BAGASSE ASH(SCBA) AS POZZOLANIC MATERIAL IN CONCRETE"** Intl J of Biological Sciences & Technological Research (IJBSTR), ISSN 2320-6020, Aug, Vol. 1, No.8, pp. 42-44.

14 Kumar, S. and **Jawaid, S M Ali (2013) "PAPER MILL SLUDGE UTILIZATION IN GROUND IMPROVEMENT"** Intl J of Biological Sciences & Technological Research (IJBSTR), ISSN 2320-6020, Aug, Vol. 1, No.8, pp. 73-76.

15 Lata, K. and **Jawaid, S M Ali (2013) "ENVIRONMENTAL IMPACTS AND UTILIZATION OF POND ASH".** Intl J of Biological Sciences & Technological Research (IJBSTR), ISSN 2320-6020, Sept, Vol. 1, No.9, pp. 01-04.

16 Lata, K. and **Jawaid, S M Ali (2013) "GEOTECHNICAL PROPERTIES OF SOIL STABILIZED WITH BAGASSE ASH"** Intl J of Biological Sciences & Technological Research (IJBSTR), ISSN 2320-6020, Sept, Vol. 1, No.9, pp. 05-08.

17 Khan, A. H.. and **Jawaid, S M Ali (2013) "UTILIZATION OF INCINERATED HOSPITAL WASTE IN Soil Improvement" ,** Intl J of Biological Sciences & Technological Research (IJBSTR), ISSN 2320-6020, Oct, Vol. 1, No.10, pp. 1-4.

18 Salman, T. and **Jawaid, S M Ali (2014)**"**Efficiency Management of Indian SPT Hammer in Context for liquefaction**" Intl J of Biological Sciences & Technological Research (IJBSTR), ISSN 2320-6020, Vol. 2, Issue 2, pp. 429-432.

19 Paswan, A. K. and **Jawaid, S M Ali (2014)**"**STABILIZATION OF SOIL USING INCINERATED HOSPITAL WASTE AND LIME**", Global Jl of Engineering and Scientific Research, Vol. 1, Issue 8, pp. 1-4

20 Singh, S., **Jawaid, S. M. Ali** and Deep S. (2014)."**HEAVY METAL REMOVAL FROM CONTAMINATED SOIL BY SOIL WASHING-A REVIEW**", Global Jl of Engineering and Scientific Research,Vol 1, No. 8, pp. 11-15

21 Singh, S., **Jawaid, S. M. Ali** and Deep S. (2014)." **REMOVAL OF CR FROM THE CONTAMINATED SOIL BY SOIL WASHING TECHNIQUE USING A MODIFIED BENCH SCALE MODEL**", Global Jl of Engineering and Scientific Research, Vol 1, No. 9, pp. 16-21

National Journal:

1. **Jawaid, S. M. A.** (1994)."**CREEP IN DUNE SANDS**", Indian Geotechnical Journal, ISSN 0971-9555, Vol. 24, No. 1, pp. 18 – 33.

2. **Jawaid, S. M. A.** (1996). **"RELATIVE DENSITY OF SANDS BY PLUVERIZATION TECHNIQUES**", Indian Highways, ISSN 0376-7256, Vol 24, No. 4, April 1996, pp. 19 –21.

3. **Jawaid, S. M. A.** and Mohan, M. **(1997). "RISK ANALYSIS OF EARTHQUAKES USING FUZZY THEORY",** Journal of Institution of Engineers(I), Civil Engg Division, ISSN 2250-2149 Vol 78, pp. 123 – 128.

4. **Jawaid, S. M. A.** and Kumar S. (1998). **"PAVEMENT DESIGN IN SEASONAL FROST**

AREAS", Indian Highways, New Delhi, ISSN 0376-7256, Sept. 1998, pp. 25 – 36.

5. **Jawaid, S. M. A.** and Akili, W.(2000). **"EFFECT OF RELATIVE DENSITY ON CREEP CHARACTERISTICS OF SANDS",** Indian Geotechnical Journal, ISSN 0971-9555, Vol. 30, No. 1, October 2000, pp. 351-366.

6. **Jawaid, S. M. A**. and Madhav, M. R. (2008)."**INNOVATIVE SKIRTED GRANULAR PILE FOUNDATION FOR HIGH WATER TABLE AREAS**", Indian Geotechnical Journal, ISSN 0971-9555, Vol. 38 , No. 4, October 2008, pp. 433-453. (**Received Best Paper Award**)

Peer Reviewed International Conferences:

1. **Jawaid, S. M. A**. (1990). **"CREEP IN DUNE SANDS OF MIDDLE EAST",** Proc. Of IIIrd International Congress of Civil Engineering, University of Shiraz, Iran, Vol. 2, pp. 145 – 150.

2. **Jawaid, S. M. A.** and Kumar, B. (1997).**"STABILIZATION OF ORGANIC SOIL USING UN-SLAKED LIME",** Proc. Of IVth International Congress on Civil Engineering, Sharif Univ of Technology, Tehran, Iran, Vol 2, pp. 326-335.

3. **Jawaid, S. M. A.** and Kumar, B.(1997). **"STABILIZATION OF ORGANIC SOIL USING AGRO-WASTE FOR HILL ROADS",** Proc. International conference on Ground Improvement Techniques, Macau, May 1997, pp. 15-19.

4. **Jawaid, S. M. A.** and Verma, O. P. (1997).**"STABILIZATION OF SILTY SAND USING RICE HUSK ASH & LIME",** Proc. Of XIVth International Conference on Soil Mechanics & Foundation Engineering(**XIV ICSMFE)**, Hamburg, Germany, Vol. 3, pp. 1565 – 1568.

5. **Jawaid, S. M. A**. (1998). **"TREATMENT OF ORGANIC SOILS BY AGRO-WASTES",** Proceeding of Intl. Symposium on Problematic Soils, Sendai, Japan, October 1998, Vol 1, pp. 29 – 32.

6. **Jawaid, S. M. A.** (2000). **"RISK ASSESSMENT OF LANDSLIDES USING FUZZY THEORY",** VIIIth Intl. Symposium on Landslides, Cardiff, U.K., 2000, pp.

7. **Jawaid, S. M. A**. and Singh, L. K. (2000). **"BEARING CAPACITY IMPROVEMENT OF SQUARE FOOTING ON SLOPES USING GEOJUTES"**, GeoEng 2000, Melbourne, Australia, Nov. 19 - 24, 2000, pp. 154-168.

8. **Jawaid, S. M. A.** and Singh, L. K. (2000). **"SOIL REINFORCEMENT USING GEOJUTE"**, 4th Intl. Conf. on Ground Improvement of Geo-systems, Helsinki, June 07 - 09, 2000, pp.

9 Madhav, M. R. and **Jawaid, S. M. A**.(2000). **"COMPOSITE FOUNDATION WITH GRANULAR CORE FOR ALLUVIAL LOWLANDS"**, Intl. Symp. on Lowland Technology, Saga, Japan, Oct. 04 -06, 2000, Vol. 1, pp. 191 – 198.

10 **Jawaid, S. M. A.** and Madhav, M. R. (2001).**"COMPOSITE GRANULAR PILE FOUNDATION FOR HIGH WATER TABLE AREAS",** Proc. XVth Intl. Conf. On Soil Mechanics & Geotechnical Engineering, Turkey, Istanbul, Vol. 2, pp. 915 – 918.

11 **Jawaid, S. M. A**. and Madhav, M. R. (2005). **"CONTINUUM APPROACH FOR ANALYSIS OF SHORT COMPOSITE CAISSON FOUNDATION",** Proc. XVIth Intl. Conf. On Soil Mechanics & Geotechnical Engineering, Osaka, Japan, Vol. 3, pp. 1435-1439. (**Best Paper Award by IGS**)

12 Madhav, M. R. and **Jawaid, S. M. A.** (2006). **"STUDY OF COMPOSITE SHORT CAISSON FOUNDATION FOR SOFT ALLUVIAL LAND"** Proc. Intl. Symposium on Lowland Technology, Saga, Japan, Vol. 1, pp. 235-240.

13 **Jawaid, S. M. A.** and Madhav, M. R. (2007). "**APPROPRIATE FOUNDATIONS FOR FLOOD-PRONE AREAS**", Proc. IVth Intl Conf on Disaster Prevention & Rehabilitation, Semarang (Central Java), Indonesia, pp.

14 **Jawaid, S. M. A.** and Madhav, M. R. (2008). "**NON-LINEAR ANALYSIS OF GRANULAR PILE WITH RIGID JACKET**", Proc. 2nd BGA International Conference on Foundations(ICOF 2008), Dundee, Scotland, pp.1281-1290.

15 Sharma,P. K., Ram S. and **Jawaid, S. M. A**. (2008). **"NUMERICAL ANALYSIS OF SOLUTE TRANSPORT THROUGH POROUS MEDIA"**, International Association for Computer Methods and Advances in Geomechanics, Goa, Vol.1, pp. 2529-2535.

16 **Jawaid, S. M. A.** and Madhav, M. R. (2008). "**VERTICALLY LOADED RIGID SHORT CAISSON WITH GRANULAR CORE IN NON-HOMOGENEOUS MEDIA",** International Association for Computer Methods and Advances in Geomechanics, Goa, Vol.1, pp. 3095-3102

17 **Jawaid, S. M. A.** and Madhav, M. R. (2009). **"COMPOSITE SHORT CAISSON FOUNDATION FOR SOFT COASTAL LOWLANDS",** 28th Intl Conf on Ocean, Offshore and Arcatic Engineering (OMAE 2009), Honolulu , USA, Vol. 1, pp.

18 **Jawaid, S. M. A**.(2009). **"CRITICAL REVIEW OF SEISMIC HAZARD EVALUATION USING INDIAN STANDARD SPT DATA",** International Conference on Infrastructure Development on expansive Soil(Index 09) at Hossur, India, Vol 1. pp.

19 **Jawaid, S. M. A**. (2010). "**COMPARISION OF LIQUEFACTION POTENTIAL EVALUATION BASED ON DIFFERENT FIELD TESTS"** 5th Intl Conf. on Recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, San Diego, USA, Paper no. 6.17 b, pp. 1-5.

20. **Jawaid, S. M. A**. (2010). "**POTENTIAL OF SOIL IMPROVEMENT USING AGRO-WASTES WITH LIME"** 6th Intl Conf. on Environmental Geotechnology, New Delhi, India , pp.

21 **Jawaid, S. M. A**. (2011). "**COMPARISION OF LIQUEFACTION POTENTIAL EVALUATION BASED ON DIFFERENT FIELD TESTS"** 26th Intl Conf. on Solid Waste Technology & Management, Philadelphia, USA, March 27-30, 2011.

22 **Jawaid, S. M. A**. and Kaushik, J. (2012). "**SOLIDIFICATION/STABILIZATION OF HOSPITAL SOLID WASTE INCINERATOR ASH FOR UTILIZATION IN GEOTECHNICAL CONSTRUCTION"** Geo Congress 2012, Oakland, CA, USA, March 25-29, 2012, pp. 3806-3815.

NATIONAL CONFERENCES

1 Ram S., **Jawaid, S. M. A.** and Ram S. (1994). **"NALOTA NALA LANDSLIDE – A CASE STUDY",** Proc 59th R & D session of CBIP, Calcutta, Vol 1, pp. 198 – 199.

2 **Jawaid, S. M. A.** and Kumar S. (1994). **"EFFECT OF FREEZE THAW CYCLES ON CBR METHOD OF PAVEMENT DESIGN",** Proc. 74th Annual Technical Session, Institution of Engineers(I), Lucknow, pp. 47 – 50.

3 Ram, S., **Jawaid, S. M. A** and Ram S. (1994)."**MANAGEMENT OF NALOTA NALA LANDSLIDE – A CASE STUDY",** Proc. 74th Annual Technical Session, Institution of Engineers(I), Lucknow, , pp. 65 –72.

4 **Jawaid, S. M. A**., Hingorani, C. P. and Ram, S. (1995). **"EARTH BERMING FOR ENERGY EFFICIENT BUILDINGS",** Proc. National seminar cum workshop on Solar Passive Architecture and Structural System for Energy Efficient Low Cost Buildings, Gorakhpur, pp. 143-150.

5 **Jawaid, S. M. A.** and Ram, S. (1995). **"ENERGY EFFICIENT HOUSE IN HOT CLIMATIC ZONES",** Proc. of National seminar cum workshop on Solar Passive Architecture and Structural System for Energy Efficient Low Cost Buildings, Gorakhpur, Aug. 1995, pp. 143-150(Co-author: Mr. Shriram).

6 **Jawaid, S. M. A.,** Srivastava, R. and Dular, R. (1995). **"STRUCTURAL PASSIVE CONTROL FOR BUILDINGS IN TROPICAL ENVIRONMENT",** Proc. National seminar cum workshop on Solar Passive Architecture and Structural System for Energy Efficient Low Cost Buildings, Gorakhpur, Aug 1995, pp. 154-164 (Co-authors: Dr. R. K. Srivastava & Mr. R. Dular).

7 **Jawaid, S. M. A.** and Mohan M. (1995). **"RISK ANALYSIS OF NATURAL HAZARDS(EARTHQUAKES) USING FUZZY THEORY",** Communication Paper, Proc. International 60th R & D session of CBIP, New Delhi, pp. 120.

8 **Jawaid, S. M. A.** and Mohan, M.(1995). **"APPLICATION OF GEOSYNTHETICS AS REINFORCEMENT IN HILLY ROADS",** Indian Geotechnical Conference, Bangalore, pp. 331-334.

9 **Jawaid, S. M. A.** and Mohan, M. (1995). **"RISK ASSESSMENT USING FUZZY LOGIC",** Proc. All India Seminar on Natural Disaster-Causes & Management, Bangalore, pp. 145 –150.

10 **Jawaid, S. M. A. (1995). "GEOTECHNICAL ASPECTS OF TIDAL POWER PROJECTS",** Proc. 75th Annual Technical Session, The Institution of Engineers(I), Dec 1995, pp. 76 – 79.

11 **Jawaid, S. M. A.,** Ram, S. and Gupta, R. K. (1995). **"APPLICATION OF GEOSYNTHETICS AS SEPARATOR IN HILL ROADS",** Proc 75th Annual Technical Session, The Institution of Engineers (I), pp. 76 – 79.

12 **Jawaid, S. M. A.** and Ram, S.(1996). **"FLOOD DISASTER & MANAGEMENT",** Proc. Regional seminar on Low Cost Flood Resisting Energy Efficient Houses for Eastern U.P., Gorakhpur, pp. 59 – 67.

13 **Jawaid, S. M. A.** and Kumar, B. (1996).**"STABILIZATION OF ORGANIC SOIL USING RICE STRAW ASH",** Proc. National Conference on New Paradigms in Civil Engineering Practices, Bhatkal, pp. 561 – 569.

14 **Jawaid, S. M. A**. and Shukla, V. K. (1996). **"STABILIZATION OF SILTY SAND USING RICE HUSK ASH & GYPSUM",** Proc. Indian Geotechnical Conference, Madras, pp. 419 – 421.

15 **Jawaid, S. M. A.** and Mohan, M.(1998). **"RISK ASSESSMENT OF LANDSLIDE HAZARDS IN HILLY REGIONS",** Proc of National Conference on Geo-environment(GEN'98), Allahabad, pp. III-34 – III-42.

16 **Jawaid, S. M. A.** (1998). **"BEARING CAPACITY OF FOUNDATIONS ON HILL SLOPES",** Proc. Indian Geotechnical Conference 1998 (IGC-98), New Delhi, Vol. 1, pp. 123 -126.

17 **Jawaid, S. M. A.** and Madhav, M. (2000). **"A NEW COMPOSITE (JACKETED) GRANULAR PILE FOR SOFT/LOOSE SUBMERGED SOIL CONDITION",** Proc. Indian Geotechnical Conference 2000, Vol. 1, pp. 127 –130.

18 **Jawaid, S. M. A.** and Madhav, M.(2001). **"ANALYSIS OF COMPOSITE FOUNDATION IN SATURATED OVER-CONSOLIDATED CLAY',** Proc. IndianGeotechnical Conference 2001, Vol. 1, pp. 167-170.

19 **Jawaid, S. M. A.** and Madhav, M. R. (2003). **"SETTLEMENT OF A NEW SHORT COMPOSITE FOUNDATION",** Indian Geotechnical Conference 2003, Vol.1, pp. 69 – 72.

20 **Jawaid, S. M. A.** Sharma, P. K. and Chowdhary, S. N. (2005)**."SOLID WASTE DISPOSAL OF GORAKHPUR CITY – A CASE STUDY",** Proceeding of National Conference on GEN-2005, pp. VII-1-4.

21 **Jawaid, S. M. A.,** Sharma, P. K. and Kumar, A. (2006)**."APPLICATION OF ELECTRIC RESISTIVITY TEST IN SITE CHARACTERIZATION",** Proc. National Conference on Corrective Engineering Practices in Troublesome Soils(CONCEPTS), JNTU College of Engineering, pp. 11-13.

22 Srivastava, S. and **Jawaid, S. M. A.** (2011)**. "SOLIDIFICATION/STABILIZATION OF PAINT SLUDGE",** Proc. National conf. on Recent advances in Ground Improvement techniques (RAGIT 2011), CBRI, Roorkee, Feb 24-25, 2011, Vol. 1, pp. 133-136.

23 Salman, T. and **Jawaid, S. M. A.** (2014), "**ENERGY MEASUREMENT OF INDIAN STANDARD SPT HAMMER**", National Conf on Recent Advances in Civil Engineering, Gorakhpur, May 21-22, pp.

24 Singh, K. L., Paswan, A, Chowdhary, S. N. and **Jawaid, S. M. A.** (2014), "**STABILIZATION OF SOFT SOIL USING SUGAR CANE BAGASSE ASH FOR RURAL ROADS**", National Conf on Recent Advances in Civil Engineering (RACE 2014), Gorakhpur, May 21-22, pp.

25 Tripathi, A., Srivastava, A. and **Jawaid, S. M. A.** (2014), "**REVIEW OF ANALYSIS OF RETAINING WALL UNDER STATIC AND SEISMIC LOADING**", National Conf on Recent Advances in Civil Engineering (RACE 2014), Gorakhpur, May 21-22, pp.

- ## List of Publications by Mr. Shri Ram

(International and National Journals)

1. **ShriRam**, and Karki, K.S., (1994), **"Local Scour around a Cylindrical Bridge Piers and Methods of Protection,"** Jr. of Indian Highways, I.R.C., New Delhi (India), April, pp. 13-21.

2. **ShriRam,** (1995), **"Environmental and Socio-Economic Aspects of Tehri Dam**", Jr. of I.W.W.A., Bombay (India) July-September, pp. 141-148.

3. **ShriRam,** and Irshad Husain (1995), **"Management of Environmental Problems of Saryu Canal Irrigation Project of Uttar Pradesh"**, Jr. I.W.W.A., Bombay (India) Jan-March, pp. 13-17.

4. **ShriRam** and Lal Pande, B.B.(1997), **"Local Scour Around Bridge Piers,"** Jr. of Water & Energy International (CBI & P) Vol. 54, No. 1, Jan.-March pp. 36-45.

5. **ShriRam,** and Lal Pande, B.B. (1997**), "Direct Equation for Hydraulic Jump Elements in a Rectangular Horizontal Channel"**, Jr. of the I.E. (India) Vol,-77, No. CV, Aug., pp. 58-60.

6. **ShriRam** and Srivastava, A.K. (1998), **"Management of Water-logging and Drainage Problems of Western Gandak Canal Project of U.P."** Jr. of I.W.W.A., Bombay (India), Vol-XXX No. 1, Jan-March, pp. 07-14.

7. **ShriRam,** Singh, J.B., and Singh, Ashok (1999), **"Environmental Impact Assessment and Evaluation for Road Construction- A Case Study".** Jr. of Indian Highways, IRC, New Delhi. Vol. 27, No.-9, September, pp. 29-43.

8. **ShriRam** (2000**), "Energy and Momentum Coefficient for Circular Pipes and Wide Open Channels"**. Jr. of the I.E. (India) Vol. 80, No. CV-I, March, pp. 37-42.

9. **ShriRam** (2001), **"Keeping Water out of Concrete-The Key to Durability",** Jr. of Civil Engineering & Construction Review, Vol.14, No. 9, pp. 22-31.

10. **ShriRam** (2002), Discussion on **"Stability and Mobility of Sand-bed Channels Affected by Seepage"**, by A.R. Rao and N. Sitaram, March / April, Vol. 128, No.-2, Jr. of Irrigation and Drainage Engineering, ASCE, pp. 132.135.
11. **ShriRam** and Lal, Pande B.B. (2002), **"Local Scour Around Bridge Abutments",** International Journal of Sediment Research, IRTCES, Beizing (China), Vol. 17, No. 1, pp. 48.74.
12. **ShriRam** (2003) **"Direct Explicit Equation for Hydraulic Jump Elements in a Rectangular Horizontal Channel,** "Jr. of Irrigation and Drainage Engineering, ASCE, Vol. 129, No. 4, pp. 191-194.

13. **ShriRam** and Shashikant, **"Removal of Bsic Dye from Aqueous Using Natural Adsorbents : Equilibrium and Diffusion Studies"** Indian Jr. Environmental Protection, Vol. 27 No. 6 June-2007 pp. 538-544.

14. **ShriRam** and Shashikant (2007), **"Removal of Basic Dye from Aqueous Solution Using Natural Adsorbents : Kinetic Studies".** Indian Jr. Environmental Protection, Vol. 27 No. 9 Sept. 2007 pp. 782-788.

• List of Seminars by Mr. Shri Ram

1. **ShriRam,** (1993), **"Groundwater Contamination in U.P. "Proc**. of National Workshop on Groundwater Resources Modelling and Groundwater Contamination, RRL, Bhopal (India) April, 17-18 (1993), pp. 200-225.

2. **ShriRam** and Irshad Husain, (1994), **"Management of Water logging and Silting Problem of Gandak Canal",** Proc. of the 59th R&D Session of CBI&P, Vol. II, Feb. 1-4 (1994), Calcutta (India) pp. 143-148.

3. **ShriRam,**& Suresh Ram, (1984), **"Nalota Nala Landslide – a Case Study",** Proc. of the 59th R&D Session of CBI&P, Vol. I, Feb. 1-4 (1984), Calcutta (India) pp. 198-199.

4. **ShriRam** and Jawaid, S.M., Ali, and Suresh Ram, (1994), **"Management of Nalota Nala Landslide – A Case Study"**, Proc. of the 74th AGM, I.E. (I) U.P. State Centre, Lucknow, 4th Dec., (1994), pp. 65-72.

5. **ShriRam,** S.M. Ali Jawaid & C.P. Hingorani, (1995), **"Earth Berming for Energy Efficient Building"** Proc. of the National Seminar-Cum-Workshop on Solar Passive Architectural and Structural Systems for Energy Efficient Low-Cost Building, Aug. 19-20 (1995), At M.M.M. Engineering College, Gorakhpur, pp.173-178.

6. **ShriRam,"Energy Efficient House Building in Hot Climatic Zones",** (1995), Proc. of the National Seminar-Cum-Workshop on Solar Passive Architectural and Structural Systems for Energy Efficient Low-Cost Buildings. Aug. 19-20 (1995) Gorakhpur (India) pp. 143.155.

7. **ShriRam**& S.M. Ali Jawaid, (1995), **"Application of Geosynthetics as a Reinforcement in Hilly Roads"** Proc. of the I.G.C.-95, Dec.22-24 (1995), Bangalore ((ndia) pp.220-224.

8. **ShriRam,** (1995), **"Local Scour Around Bridge Piers in Non-Cohesive Soils"**, Proc. of the 75th A.G.M. of the I.E. (India) U.P. State Centre, Lucknow, 4th Dec. (1995), pp.55-62.

9. **ShriRam,** (1995), **"Application of Geosynthetics as Separator in Hill Roads",** Proc. of the 75th A.G.M. of the I.E. (India) U.P. State Centre, Lucknow, 4th Dec. (1995), pp.55-62.

10. **ShriRam,** and Om Prakash, (1996), **"Estimating of Mean Velocity in Mountain Rivers."** Proc. of the All India Seminar on Hydraulic Engineering, organized by ISH, at I.E. (India) Nagpur Local Centre, Nagpur, Jan. 27-28 (1996) pp. 45-51.

11. **ShriRam** and Jawaid, S.M., Ali, (1996), **"Flood Disaster and Its Management"** Proc. of the Regional Seminar on Low-Cost Flood Resisting Energy Efficient Houses for Eastern U.P. at Gorakhpur, March 13-14 (1996), pp. 59-67.

12. **ShriRam** and Suresh Ram, (1996) ,**"Prediction of Local Scour Around Bridge Piers,"** Proc. of the 76th AGM of the I.E. (India) U.P. State Centre, Lucknow, Nov. 16-17 (1996) pp. 36-42.

13. **ShriRam**, (1997) , **"Predicting Local Scour Down Stream of a Hydraulic Structure in Alluvial Channels",** Proc. of 2nd International R&D Conference, Water and Energy organized by CBI&P at Vadodara, Oct. 21-24 (1997), Vol.-I, Oct. 21-24 (1997) pp. 377-384.

14. **ShriRam**, (1997), "**Energy and Momentum Coefficients for Circular Pipes and Wide Open-Channels"** Proc. of 42nd ISTAM Congress, Surat (Gujarat), Dec. 28-31, (1997) Vol-II, pp. 125-132.

15. **ShriRam** et al, (1998), **"Environmental Impact Assessment and Evaluation for Road Construction - A Case Study"** Proc. of the Indian National Conference on Geo-environment-Characterization, Analysis, Design and Practice, Allahabad, April 9-10, (1998), pp. V-67-77.

16. **ShriRam,** (1998), "**Environmental Impact Assessment of Floods - A Theoretical Approach",** Proc. of the Indian National Conference on Geo-environment-Characterization, Analysis, Design and Practice, at MNR Engg. College, Allahabad, April 9-10, (1998), pp. II-13-18.

17. **ShriRam** and Gautam, S.K., (1998), **"Effect of Flow Instability on Friction Factor in Rough and Steep Slope Channels"**, Proceeding of International Conference on Theoretical,

Applied, Computational and Experimental Mechanics, Dec. 1- 5, (1998), IIT, Kharagpur, India, PP. 1/1-8.

18. **ShriRam,** (1998), **"A Theoretical Model to Predict Local Scour at Bridge piers in Non-Cohesive Soils",** Proceeding of Seventh International Symposium on 'River Sedimentation', Dec. 16-18, (1998). University of Hong-Kong, Hong-Kong, pp. 173-178.

19. **ShriRam,** and Lal, Pande B.B., (1999), "**Scour Protection Measures Around Bridge Piers"**, Proc. of International Seminar on Highway Rehabilitation and Maintenance, Org. by IRC, 12-13 Nov., (1999), New Delhi, pp.II-109-121.

20. **ShriRam** and Lal, Pande, B.B., (1999), "**Inspection of Bridges for Scour and Scour Counter Measures around Bridges Piers and Abutments"** Proc. 79th Annual Tech. Vol. of the I.E. (India), U.P. State Centre, Lucknow, 24-25, Dec. (1999), pp. 67-82.

21. **ShriRam** and Upadhyaya, P. (2000), **"Existing Life of Matatila Reservoir – A case Study",** Proc. of 3rd International R&D Conference (2000), CBI & P, New Delhi, at Jabalpur (M.P.) 29 Feb. – 3 March, (2000),, pp. 127-139.

22. **ShriRam** (2000), **"Water Resources Development in Nepalese Perspective"** Seminar Organized by Lumbini Engineering College, Lumbini at Butwal (Nepal), 17 Dec. 2000, pp. 41-51.

23. **Shriram** (2001) **"Important Changes in Revised Code IS : 456-2000"** Proc. of National Workshop on Revised Indian Concrete Code (IS456-2000), Oct. 18. (2001) at M.M.M. Engineering College, Gorakhpur, pp. 67.

24. **Shriram** (2003) **"Clear Water scour around bridge abutment"** Proc. of Symposium on Advances in Geotechnical Engg (SAGE-2003), 7-9 March (2003), Civil Engg. Department. I.I.T. Kanpur, pp.

25. **ShriRam** and Roy, Alak (2003), **"Management of Water for National Development"**. Proc. of Seminar on "Water Management Beyond 2010" organized by the Institution of Engineers (India) Local Centre, Durgapur, West Bengal, 25th April, 2003, pp. 32-42.

26. **Shriram** and Jawaid A.M. Ali (2003), **"Rain Water Harvesting from Roof-top catchements"** Proc. of Role of Engineers in 'All-Round Development of the Nationa 18th Indian Engineering Congress organized by IE (India), Dec. 19-21, (2003), pp. 251-263.

27. **Shriram** (2004), **"Solute Transport through Porous Media and Ground Water contamination and Remediation".** Proc. of Workshop on Environmental Pollution: Perpectives & Practices, April 30, at I.E.T., Lucknow, p.p. 154-166.

28. **ShriRam** (2004), **"Facing Future Earthquakes"** National Workshop on Geotechnical and Structural Measures for Earthquake Disaster Mitigation in Terai Region, at M.M.M. Engineering College, Gorakhpur, Oct. 11-12 (2004), p.p. 104-121.

29. **Shriram** (2005), **"Sediment Threshold – An Overview",** Proc. of Hydro-2005 held at Tumkur, Karnatka, December 08-09, pp. 167-176.

30. **Shriram** (2006), **"Roof-Top Rainwater Harvesting and Artificial Groundwater Recharge",** Proc. of National Workshop, Workshop on Waste Water Recycling & Reuse and Water Conservation, I.T., B.H.U., Varanasi, 25th March, 2006, p.p. 65-79.

31. **Shriram** (2006), **"Temporal Development of Clear – Water Scour Around Cylindrical Bridge Piers"**, International Conference and Scour and Erosion, 1-3 November, 2006, Amsterdam, The Netherlands.

32. **ShriRam,** Sharma, P.K. and Jawaid, S.M.(2008) **"Numerical Analysis of Solute Transport through Porous Media "** , IACMAG, 1-6 October, 2008 at Goa, India pp. 2529-2535.

33. **ShriRam** (2011), **"Explicit Equations for Sediment Threshold and Incipient Condition",** Proc. Of Hydro-2011 i.e. National Conference on Water Resources Development at SVNIT Surat, Dec 29-30, 2011, pp. 674-684.

34. **ShriRam** (2012), **"Sidewall Correction for Bed Shear Stress in Open Channel Flows- An Overview",** Proc. Of Hydro-2012 i.e. National Conference on Water Resources Development at IIT Bombay, Dec 2-3, 2012, pp. 252-263.

35. **Shriram** (2014), **"Fuzzy Controller To Reduce Irrigation In Greenhouse Using Matlab"** National Conference on Recent Advances In Civil Engineering, at MMMUT Gorakhpur, 21-22 May, 2014.

36. **Shriram** (2014), **"Scour Reduction around Bridge Piers: An Overview"** National Conference on Recent Advances In Civil Engineering, at MMMUT Gorakhpur, 21-22 May, 2014.

37. **Shriram** (2014), **"Deforestation and Its Effect On Landslides"** National Conference on Recent Advances In Civil Engineering, at MMMUT Gorakhpur, 21-22 May, 2014.

38. **Shriram** (2014), **"Flow Resistance in Mountainous Rivers"** National Conference on Recent Advances in Civil Engineering, at MMMUT Gorakhpur, 21-22 May, 2014.

39. **Shriram** (2014), **"Settling Velocity and Its Dependence On Floc Size And Density"** National Conference on Recent Advances In Civil Engineering, at MMMUT Gorakhpur, 21-22 May, 2014.

40. **Shriram** (2014), **"Critical Review Of Drag Coefficient For Sediment Settling"** National Conference on Recent Advances In Civil Engineering, at MMMUT Gorakhpur, 21-22 May, 2014.

41. **Shriram** (2014), **"Local Scour At Bridge Piers"** National Conference on Recent Advances In Civil Engineering, at MMMUT Gorakhpur, 21-22 May, 2014.

42. **Shriram** (2014), **"Temporal Development Of Clear-Water Scour Around Cylindrical Bridge Piers"** National Conference on Recent Advances In Civil Engineering, at MMMUT Gorakhpur, 21-22 May, 2014.

43. **Shriram** (2014), **"Explicit equations for sediment Threshold"** National Conference on Recent Advances In Civil Engineering, at MMMUT Gorakhpur, 21-22 May, 2014.

44. **Shriram** (2014), **"Explicit equations for settling of sediment particles"** National Conference on Recent Advances In Civil Engineering, at MMMUT Gorakhpur, 21-22 May, 2014.

List of Publications by Sana Zafar (International Journals)

- Zafar, S., Rao, K.S. (2014)**Assessment of Cyclic Triaxial Behavior of Shiwalik Sandstone.** *International Journal of Research in Engineering and Technology, 5 (2), pp. 206-213.*
- Zafar, S., Rao, K.S. (2014) **Effect of Moisture and Confining Pressure on Mechanical Behaviour of Shiwalik Sandstone.***International Journal for Research in Applied Science and Engineering and Technology,8(2) pp.145-150*

List of Publications by Dr. A. K. Mishra

1- Mishra A. K. and Srivastava P. "Measurement and Prediction of Carbon Monoxide in the Surrounding Areas of An Upcoming Airport" ,**Journal of Environmental Research and Development-Vol. No.6, Issue No.4, pp-981-987, June 2012.**

2- Mishra A. K. and Srivastava P. "Assessment of Traffic Noise Pollution in the surrounding area of an upcoming airport"**,Indian Journal of Environmental Protection, Vol. 32, pp 857-863, October 2012 .**

3- Mishra A. K. and Srivastava P. "Assessment and Prediction of Noise Level on various Links in the surrounding Area of an Upcoming Airport in India" ,**International Journal of Research in Engineering and Technology, Vol. 1, Issue 2, pp-118-124, October 2012.**

4- Mishra A. K. and Srivastava P." Assessment of Ambient Air quality monitoring in the surrounding areas of an upcoming Airport in India" ,**International Journal of Scientific and Engineering Research-** volume4,Issue 1,January-2013**.**

5- Mishra A. K. and Srivastava P **"Noise Impact Assessment due to Aircraft Operations in the surrounding Areas of an Upcoming Airport in India" ,Research Journal of chemistry and environment, Vol. 17, Issue 10, pp 225-236, October 2013.**

6- Mishra A. K., Srivastava P and R. S.Patil **"Measurement and Analysis of the Gaseous Pollutants around the Upcoming Airport in India" International journal of innovative research in science, engineering and technology, Vol. 2, Issue 9, pp 4921-4925, September 2013.**

7- Mishra A. K., Srivastava P and R. S.Patil "Seasonal Variation of PM10 around an upcoming airport" **International journal of innovative research in science, engineering and technology. Vol. 2, Issue 10, September 2013.**

8- Mishra A. K., Srivastava P and R. S.Patil "**variation of Noise Level in the surrounding areas of an upcoming airport"** ,National Symposium on Environment (NSE-18), Current Perspective on Environmental Protection, March 11-12, 2013, pp 325-329.

9- Mishra A. K., Pandey G. and Pravin Kumar "A study of noise pollution in some highway corridor near Gorakhpur city. **International Journal of Engineering Reaearch and Technology , Vol. 3, Issue 12, December 2014.**

10- Mishra A. K., Srivastava P "Modelling of Ambient SO2 and NOx pollutants around an upcoming international airport". **, Indian Journal of Environmental protection, Vol. 35, pp 73-79, January 2015 .**

List of Publications by Dr. Govind Pandey

1. Yadav A.K. , Sahoo S.K. , Mahapatra S. , Kumar V., Pandey Govind, Lenka P., Tripathi R.M.(2014) "Concentrations of Uranium in Drinking Water and Cumulative, Age

Dependent Radiation Doses in Four Districts of Uttar Pradesh" Toxicological and Environmental Chemistry, ISSN 0277-2248 , Vol. 96(1), pp.1 – 9.

2. Singh D., Shukla S.P., Sharma M., Behera S.N., Mohan D., Singh N.B., Pandey Govind.(2014) "GIS Based On-Road Vehicular Emission Inventory for Lucknow City" Journal of Hazardous, Toxic and Radioactive Waste, American Society of Civil Engineers (ASCE), ISSN 1064-3389, September 4, 2014.

3. Mumtaz Neha, Pandey Govind, Labhasetwar P.K.,(2015) "Global Fluoride Occurrence, Available Technologies for Fluoride Removal and Electrolytic Defluoridation: A Review" Critical Reviews in Environmental Science and Technology, ISSN 1064-3389, 07 May 2015.

4. Mumtaz Neha, Pandey Govind, Labhasetwar P.K, Andey S.(2012), "Operating Cost Analysis of Continuous Mode Electrolytic Defluoridation Process" International Journal of Civil, Structural, Environmental and Infrastructure Engineering Research and Development, ISSN (Print) : 2249-6866, Vol. 2 (3), pp. 12 – 29.
5. Mumtaz Neha, Pandey Govind, Labhasetwar P.K, Andey S.(2012), "Evaluation of Operational Parameters Involved in Electrolytic Defluoridation Process", International Journal of Civil, Structural, Environmental and Infrastructure Engineering Research and Development, ISSN (Print) : 2249-6866, Vol. 2 (4), pp. 23 – 32.
6. Singh R., Pandey G.,(2013) "A Study of Noise in Gorakhpur City, Uttar Pradesh (India)", International Journal of Structural and Civil Engineering Research, ISSN: 2319-6009, Vol. 2 (3), pp. 241 – 249.
7. Singh R., Pandey G.,(2013) "Noise Pollution – An Overview" International Journal of Biological Sciences and Technological Research, ISSN: 2320-6020, Vol. 1 (8), pp. 65 – 68.
8. Singh R., Pandey G.,(2013) "Noise Pollution During Festive Season in Gorakhpur City, Uttar Pradesh, India" International Journal of Engineering Research and Technology, ISSN: 2278-0181, Vol. 2 (11), pp. 1777 – 1784.
9. Prajapati D., Pandey Govind,, Gore M.M., Srivastava D.K., Mishra B.R., (2013) "Assessment of Physico-chemical Parameters of Groundwater in Some Encephalitis Affected Blocks of Gorakhpur District" International Journal of Engineering Research and Technology, ISSN: 2278-0181, Vol. 2 (11), pp. 2730 – 2736.
10. Gupta P., Pandey Govind,, Gore M.M., Srivastava D.K., Mishra B.R(2013) "Assessment of Biological Parameters of Groundwater in Some Encephalitis Affected Blocks of Gorakhpur District" International Journal of Engineering Research and Technology, ISSN: 2278-0181, Vol. 2 (11), pp. 2754 – 2759.
11. Verma A., Pandey G., (2013)"Study of Some Physico-chemical Parameters of Groundwater in Gorakhpur District" International Journal of Engineering Research and Technology, ISSN: 2278-0181, Vol. 2 (11), pp. 2967 – 2973.
12. Siddiqui J., Pandey G., Akhtar S. (2013)"A Case Study of Solid Waste Management in Mysore City International"Journal of Application or Innovation in Engineering and Management, ISSN: 2319 – 4847, Vol. 2 (11), pp. 290 – 294.

13. Singh P., Pandey G., Parida P.(2013) "Review of Methodologies for the Estimation of CO_2 Emission from Transport Sector" International Journal of Engineering Research – Online, ISSN: 2321-7758, Vol. 1 (3), pp. 363 – 370.
14. Shukla S., Pandey G., Parida P.(2013) "Features and Characteristics of MOVES 2010b Software Used for Estimating Emission from Transport Sector" International Journal of Engineering Research – Online, ISSN: 2321-7758, Vol. 1 (3), pp. 414 – 420.
15. Yadav A.K., Sahoo S.K., Kumar A.V., Pandey G.(2013) "Spatial and Temporal Variation of Particulate Matter with Height in Residential and Sand Mining Areas in Ganjam District of Odisha" International Research Journal of Environmental Sciences, ISSN 2319–1414 , Vol. 2 (12), pp. 19 -24.
16. Vishwakarma P.K., Pandey G.,(2013) "A Study on Water Quality of Ami River in Uttar Pradesh" International Journal of Engineering Research and Technology, ISSN: 2278-0181, Vol. 2 (12),pp. 3000 –3007.
17. Gupta S.K., Pandey G.,(2014) "Assessment of Physico-chemical Water Quality Parameters of Surajkund Pond in Gorakhpur City", International Journal of Engineering Sciences and Research Technology, ISSN: 2277-9655, Vol. 3 (1), pp. 23 – 25.
18. Verma A., Pandey G., (2014)"A Study of Groundwater Quality in Urban and Peri-urban Areas of Gorakhpur City in India"International Research Journal of Environmental Sciences, ISSN 2319–1414, Vol. 3 (1), January, 2014, pp. 6 – 8.
19. Gupta P., Pandey Govind, Gore M.M., Srivastava D.K., Mishra B.R., (2014), "A Study on the Presence of Faecal Coliforms (E. coli) in Groundwater Samples of Gorakhpur City, India" International Research Journal of Environmental Sciences, ISSN 2319–1414, Vol. 3 (1), January, 2014, pp. 9 – 12.
20. Prakash A., Choudhary, Pandey G., (2014), "Design and Operational Aspects of Common Effluent Treatment Plant in GIDA Project Area of Gorakhpur (U. P.)" International Journal of Engineering Sciences and Research Technology, ISSN: 2277-9655, Vol. 3 (3), March, 2014, pp. 1815 – 1821.
21. Kumar P., Pritam U., Yadav R., Pandey G., (2014),"Noise Tube: Measuring and Mapping Noise Pollution withMobile Phones"International Journal for Scientific Research and Development, ISSN (online): 2321-0613, Vol. 2(6), 2014, August, 2014, pp. 652 – 654.
22. Mumtaz Neha, Pandey Govind, Labhasetwar P.K., (2014), "Assessment of Electrolytic Process for Water Deffluoridation" International Research Journal of Public and Environmental Health, ISSN 2360-8803, Vol. 1 (9), November, 2014, pp. 175 – 182.
23. Kumar P., Pandey G.,Mishra A.K.(2014) "A Study of Noise Pollution in Some Highway Corridor Near Gorakhpur City", International Journal of Engineering Research and Technology, ISSN: 2278-0181, Vol. 3 (12), December, 2014 pp. 94 – 101.
24. Tripathi V., Pandey G., Singh S.P.,(2014) "Assessment of Outdoor and Indoor Noise Pollution in Silence Zone of Gorakhpur City", International Journal of Engineering Research and Technology, ISSN: 2278-0181, Vol. 3 (12), December, 2014 pp. 226 – 231.
25. Kumar S., Pandey G., Sharma A.,(2014) "Assessment of Arsenic in Groundwater of Gorakhpur District in Uttar Pradesh (India)", International Journal of Engineering Research and Technology, ISSN: 2278-0181Vol. 3 (12), December, 2014 pp. 766 – 770.

26. Tripathi V., Pandey G., Singh S.P.,(2014)"Assessment of Outdoor and Indoor Noise Pollution in Commercial Areas of Gorakhpur City", International Journal of Engineering Research and Technology, ISSN: 2278-0181, Vol. 3 (12), December, 2014, pp. 777 – 783.

27. Vishen S., Pandey G., "Assessment of Water Quality in Rapti River from Gorakhpur to Kaparwar Ghat in Uttar Pradesh", International Journal for Scientific Research and Development,ISSN: 2321-0613, (Online)Vol. 2 (10), December, 2014 pp. 76 – 82.

28. Siddiqui J., Pandey G., Singh P., (2012)"A Study on Harmful Effects of Ionizing Radiation and Human Health" Proceedings of 7th International Conference on 'Radiation, Cancer and Society' (ICRCS – 2012) organized by Nehru Gram Bharati University, Allahabad at Allahabad, November 26 – 28, 2012.

29. Siddiqui J., Pandey G., Singh P., (2012)"A Study on Adverse Effects of Wireless Radiations on Human Health" Proceedings of 7th International Conference on 'Radiation, Cancer and Society' (ICRCS – 2012) organized by Nehru Gram Bharati University, Allahabad at Allahabad, November 26.

30. Mumtaz Neha, Pandey Govind, Labhasetwar P.K, Andey S.(2013), "A Study on Optimization of Electrolytic Defluoridation by Continuous Mode" Proceedings of International Conference 'Harmony - 2013' on 'Harmony with Nature in Context of Ecotechnological Intervention and Climate Change', D. D. U. Gorakhpur University, Gorakhpur, November 11 – 13, 2013.

31. Mumtaz Neha, Pandey Govind, Labhasetwar P.K, Andey S.(2014), "Sustainable Technological Intervention Strategy for Fluoride Removal in Fluorosis Endemic Areas" International Conference on 'Environmental Technology and Sustainable Development: Challenges and Remedies' organized by Department of Environmental Science, Babasaheb Bhimrao Ambedkar University (Central University), Lucknow, February 21 – 23, 2014.

32. Yadav A.K., Sahoo S.K., Dubey J.S., Tripathi S.K., Sagar D.V., Kumar A.V., Pandey G., Tripathi R.M.,"Temporal Variation of SPM and PM_{10} and Distribution of Toxic Metals Around a Beach Sand Mining Site" ,Proceedings of Workshop cum National Symposium on Environment (NSE – 18) on 'Current Perspectives on Environmental Protection' organized by Department of Chemical Engineering, JNTUA College of Engineering, Anantapur (Andhra Pradesh) and Health Safety and Environment Group, Bhabha Atomic Research Centre, Mumbai at Jawaharlal Nehru Technological University, Anantapur, ISBN: 978-81-7800-287-3, March 12 – 13, 2013. pp. 309-313

33. Singh I., Yadav A.K., Pandey G., Sharma S.N., "Material as a Replacement of Cement Utilization of Flyash in Cost Effective Construction" Proceedings of Workshop cum National Symposium on Environment (NSE – 18) on 'Current Perspectives on Environmental Protection' organized by Department of Chemical Engineering, JNTUA College of Engineering, Anantapur (Andhra Pradesh) and Health Safety and Environment Group, Bhabha Atomic Research Centre, Mumbai at Jawaharlal Nehru Technological University, Anantapur, ISBN: 978-81-7800-287-3, March 12 – 13, 2013.

34. Singh S.P., Pandey G., Pritam U., Tripathi V., "Regeneration Process in Removal of Cr (VI) and As (V) Using MWCNT from Aqueous Solution" Proceedings of National Conference on 'Materials Science and Technology' organized by Department of Applied Sciences, M. M. M. University of Technology, Gorakhpur, ISBN 978-93-84224-01-1, March 10 – 11, 2014." pp. 93 – 97.

35. Mumtaz Neha, Pandey Govind, Labhasetwar P.K, Andey S. "An Assessment of Electrolytic Defluoridation as a Novel Strategy for Fluoride Removal " Proceedings of National Conference on 'Recent Advances in Civil Engineering (RACE – 2014)' organized by Department of Civil Engineering, M. M. M. University of Technology, Gorakhpur, May 21 – 22, 2014.

5.8 Faculty Intellectual Property Rights (FIPR) (10)

Assessment of FIPR = 2 × (Sum of the FIPR points scored by each faculty member)/N

(Instruction: A faculty member scores maximum five FIPR points each year??. FIPR includes awarded national/international patents, design, and copyrights.)

Name of the faculty (contributing to FIPR)	FIPR Points (max. 5 per faculty)		
	CAYm2	CAYm1	CAY
N (Number of faculty			
positions required for an STR			
Assessment of FIPR = 2× Sum/*N*			
Average Assessment			

5.9 Funded R&D Projects and Consultancy (FRDC) Work (20)

Assessment of R&D and consultancy projects = 4 × (Sum of FRDC by each faculty member)//N
(Instruction: A faculty member scores maximum 5 points, depending upon the amount.) A suggested scheme is given below for a minimum amount of Rs. 1 lakh:

Five points for funding by national agency,
Four points for funding by state agency/ private sector, and
Two points for funding by the sponsoring trust/society.

Name of the faculty (contributing to FRDC)	FRDC Points (max. 5 per faculty)		
	CAYm2	CAYm1	CAY
Dr . S.M. Ali Jawaid	4	4	4
Dr. R.K. Shukla	4	4	4
Dr. Shri Ram	4	4	4
Shri Ram Dular	4	4	4
Shri S.N. Choudhary	4	4	4

Dr. Govind Pandey	4	4	4
Dr.Arun Kumar Mishra	4	4	4
Mr.Dilip Kumar	4	-	-
Ms.Sana Zafar		4	4
Ms. Sunayana		4	4
Sum	32	36	36
N	15	16	16
Assessment FRDC = 4x Sum/N	8.53	9.00	9.00
Average Assessment			8.84

List Of Consultancy Rendered By Civil Engg. Department

Year 2014-15

Sr. No.	Detail Of Client	Amount
1	EX. Engineer, Saryu Nahar Khand-7, Basti	760251.00
2	EX. Engineer, Flood Works Div., Deoria	498168.00
3	Saryu, Khand-5, Gonda	494384.00
4	PWD, Gonda	440732.00
5	Ex. Engineer, Saryu Nahar Khand-2 Basti	342699.00
6	Suptd Engineer, 9th Div, UP Irrigation Deptt. , Bahraich	321912.00
7	Irrigation Department, Maharajganj	296743.00
8	EX. Engineer, Saryu Nahar Khand-5, Gonda	293823.00
9	Project Manager, Unit 14, C & DS,GKP.	253934.00
10	UPRNN, GKP. Unit	235955.00
11	Chief Gan. Manager, C&DS, Lucknow	233709.00
12	U.P. PWD, GKP.	229214.00
13	Saryu Nahar, Khand-2, Basti	222473.00
14	PIU,RES, Deoria	197754.00
15	Secretary, G.D.A., GKP.	192698.00
16	Office Project Manager Conc.Unit, U.P. Jal Nigam, GKP.	179776.00
17	PIU,RES, Maharajganj	179214.00
18	EX. Engineer, PWD, Siddharthnagar	173035.00
19	Secretary, GDA, GKP.	167416.00
20	P.W.D., GKP	161799.00
21	PIU-2 RES, Siddharthnagar	160676.00
22	P.M. Unit-19, C&DS U.P. Jal Nigam, Gorakhpur	151686.00
23	Medical Institute within BRD Medical College campus Gorakhpur	143259.00

24	EX. Engineer Conc. Div.-1, P.W.D., Gorakhpur	140450.00
25	EX. Engineer Conc. Div.-1, P.W.D., Gorakhpur	140450.00
26	Construction Div. P.W.D., Maharajganj	136019.00
27	EX. Engineer Conc. Div.-3, P.W.D., Gorakhpur	112360.00
28	EX. Engineer Conc. Div.-3, P.W.D., Gorakhpur	112360.00
29	PACCFED, GKP.	111240.00
30	EX. Engineer, Flood Division, Ballia	105057.00
31	P.M. UPRNN,GKP.	94725.00
32	P.M. UPRNN, GKP.	80562.00
33	N.H.A.I., GKP.	78653.00
34	N.H.A.I.,GKP.	78653.00
35	UP Power Transmission Corporation Ltd Gorakhpur	63484.00
36	EX. Engineer Conc. Div. P.W.D., Banshi	62023.00
37	EX. Engineer Conc. Div. P.W.D., Banshi	62023.00
38	PIU, RES, Kushinagar	61798.00
39	EX. Engineer, UPSKNN Ltd., Gorakhpur	60674.00
40	EX. Engineer, UPSKNN Ltd., GKP.	60674.00
41	EX. Engineer Conc. Div.-1, P.W.D., Kushinagar	53596.00
42	EX. Engineer Conc. Div.- P.W.D., Kushinagar	53596.00
43	P.M. UPRINN, GKP.	53287.00
44	PGCIL, Faizabad	53091.00
45	P.M. UPPCL, Unit 23, Basti	44944.00
46	Ex.Engineer Construction Division, UP Jal Nigam, Maharajganj	43259.00
47	PWD, Kushinagar/Deoria	39887.00
48	P.M. UPRNN,GKP.	38975.00
49	PGCIL, Sohawal	38770.00
50	C&DS, Jal Nigam, AZM.	36798.00
51	IRCON, Patna	36798.00
52	C&DS, Jal Nigam, GKP.	36461.00
53	P.M. UPRNN, GKP.	35955.00
54	Khare & Tarkunde, Nagpur	35058.00
55	EX. Engineer Conc. Div.-1, P.W.D., Siddarthnagar	33708.00
56	EX. Engineer Conc. Div.-1, P.W.D., Siddarthnagar	33708.00
57	EX. Engineer Prantya Div., Maharajganj	33708.00
58	UP Power Transmission Corporation Ltd Gorakhpur	29776.00
59	Const. Division PWD , Kushinagar	29664.00
60	Const. Div. PWD , GKP	27304.00
61	Irrigation Deptt., Mau	26292.00
62	PGCIL,GKP	25169.00
63	U.P. Smaj Kalyan, GKP.	24945.00
64	PCCIL (L&T), Ballia	23765.00
65	Const. Div 37, Awas & Vikas, GKP	23034.00

66	GDA, GKP.	22472.00
67	P.W.D., Siddharthnagar	22023.00
68	MES, Faizabad	22023.00
69	PWD, Kushinagar	22023.00
70	do	21910.00
71	PCCIL (L&T), GKP.	19832.00
72	EX. Engineer, Const. Div. UPPWD, Kushinagar	19101.00
73	CPWD, Maharajganj	18932.00
74	CPWD, Maharajganj	18932.00
75	N.H.A.I., GKP.	18652.00
76	EX. Engineer Prantya Div., Maharajganj	17640.00
77	C&DS, Jal Nigam, GKP.	17247.00
78	C&DS, Jal Nigam, GKP.	17247.00
79	C&DS, Jal Nigam, GKP.	17247.00
80	P.N.C. Infratech Ltd. C/o M.E.S., Gorakhpur	16856.00
81	P.N.C. Infratech Ltd. C/o M.E.S., Gorakhpur	16856.00
82	PNC Infratech Ltd. (Airforce GKP.)	15674.00
83	UPRNN, GKP.	15562.00
84	Nagar Palika, Basti	15168.00
85	Viz Infracon Ltd Lucknow	14720.00
86	P.W.D.Sohratgarh, Siddharthnagar	14719.00
87	do	14157.00
88	C&DS Jal Nigam,GKP.	13652.00
89	PACCFED, GKP.	12977.00
90	C&DS, Jal Nigam, GKP.	12697.00
91	PIU, RES,Deoria	12360.00
92	Const. Div. PWD , GKP	12135.00
93	Nagar Nigam, GKP.	11460.00
94	U.P. Bridge Corporation, GKP.	10618.00
95	UP Jal Nigam, Deoria	10618.00
96	D.R.D.A.	10113.00
97	EX. Engineer G.D.A., GKP.	10080.00
98	Ravi Construction	9944.00
99	Arpit Anand Nirman Dream Dev, GKP.	9633.00
100	C&DS, Jal Nigam	9382.00
101	Nirman Khand PWD, GKP.	9102.00
102	U.P. Govt. Technical Cell P.W.D., Lucknow	9102.00
103	Ex. Engineer, Prov. Div. PWD, Siddarthnagar	8989.00
104	EX. Engineer G.D.A., GKP.	8765.00
105	EX. Engineer G.D.A., GKP.	8765.00
106	EX. Engineer G.D.A., GKP.	8765.00
107	PGCIL, Kushinagar	8539.00

108	C.D.O. Siddarthnagar	8539.00
109	do	8427.00
110	Const. Div 3 PWD GKP	8427.00
111	PWD, GKP	8427.00
112	Nagar Panchayat, Pipraich	8427.00
113	EX. Engineer G.D.A., GKP.	8203.00
114	PCCIL(L&T), GKP.	7922.00
115	Const. Div PWD , Sidhhartnagar	7866.00
116	PACCFED, GKP.	7584.00
117	do	7304.00
118	CPWD, Maharajganj	7304.00
119	CPWD, Maharajganj	7304.00
120	PNC Infratech Ltd. (Airforce GKP.)	7304.00
121	K.K.Construction, GKP.	7247.00
122	BPCL, Baitalpur	7191.00
123	Nagar Panchayat, Pipraich	6405.00
124	C&DS, Santkabir nagar	6180.00
125	PACCFED, GKP.	6086.00
126	EX. Engineer G.D.A., GKP.	6069.00
127	PWD, GKP	6068.00
128	Prov. Div. , PWD , Deoria	6068.00
129	Const. Div.,Basti	6068.00
130	EX. Engineer G.D.A., GKP.	6068.00
131	Saadi Agro & Allied Industries, Compierganj	6011.00
132	PWD, GKP.	5730.00
133	Steinberg Engg. Consultants, GKP.	5618.00
134	EX. Engineer G.D.A., GKP.	5618.00
135	EX. Engineer G.D.A., GKP.	5618.00
136	UPSID	5618.00
137	C.D.O., Siddarthnagar	5394.00
138	UPRNN, GKP.	5394.00
139	PGCIL, Faizabad	5337.00
140	PGCIL, GKP.	5058.00
141	PWD, Santkabir Nagar	5057.00
142	do	5056.00
143	do	5056.00
144	DUDA, Maharajganj	5056.00
145	DUDA, Maharajganj	5056.00
146	PCCIL(L&T), GKP.	4719.00
147	Orchid, GKP	4385.00
148	do	4045.00
149	UPRNN, Gorakhpur	4045.00

150	do	4045.00
151	C.D.O., Siddarthnagar	4045.00
152	U.P. Samaj Kalyan, GKP	4045.00
153	EX. Engineer G.D.A., GKP.	4045.00
154	DUDA, Basti	4045.00
155	Nagar Panchayat, Mehndawal	4045.00
156	EX. Engineer Prantya Div., Maharajganj	4036.00
157	EX. Engineer Prantya Div., Maharajganj	4036.00
158	NER GONDA	3933.00
159	EX. Engineer G.D.A., GKP.	3821.00
160	GIDA, GKP.	3708.00
161	PWD, GKP.	3708.00
162	GIDA, GKP.	3708.00
163	Jai Kumar Mishra, GKP.	3540.00
164	PGCIL, (Sanjay Traders), GKP.	3540.00
165	MES, GKP.	3372.00
166	Nagar Palika, Basti	3371.00
167	Gharpure Engineering & Const., Pune	3371.00
168	UPRNN, GKP.	3371.00
169	Sakapai/Mukh-11, NER, Gorakhpur	3371.00
170	Amit Eco Friendly Bricks	3371.00
171	EX. Engineer G.D.A., GKP.	3035.00
172	EX. Engineer G.D.A., GKP.	3035.00
173	Prov. Div. , PWD , Deoria	3034.00
174	Prov. Div. , PWD , Deoria	3034.00
175	Nagar Palika, Basti	3034.00
176	do	3033.00
177	D.U.D.A., GKP.	3033.00
178	Nagar Palika, Basti	3033.00
179	Nagar Panchayat, Mehndawal	3033.00
180	do	3033.00
181	Samaj Kalyan, GKP.	3033.00
182	Nagar Palika, Basti	3033.00
183	Nagar Palika, Basti	3033.00
184	Nagar Palika, Basti	3033.00
185	Nagar Palika, Basti	3033.00
186	EX. Engineer G.D.A., GKP.	3032.00
187	EX. Engineer G.D.A., GKP.	3032.00
188	NER Gorakhpur	2809.00
189	NER Gorakhpur	2697.00
190	Office C.D.O. Siddarthnagar	2697.00
191	PGCIL (L&T), Ballia	2585.00

192	D.D.U. University	2585.00
193	do	2585.00
194	GIDA, GKP.	2400.00
195	BPCL, Baitalpur	2303.00
196	do	2303.00
197	Mukh 11 NER Gorakhpur	2248.00
198	Mukh 11 NER Gorakhpur	2248.00
199	Singh Interprises 50, M.I.G. Road Allahabad	2248.00
200	Aditi Conc. Company 14-b Belly Road Katra, Allahabad	2248.00
201	Singh Interprises 50, M.I.G. Road Allahabad	2248.00
202	Aditi Conc. Company 14-b Belly Road Katra, Allahabad	2248.00
203	R.P. Singh Civil Contractor	2248.00
204	Indian Oil, GKP.	2247.00
205	do	2022.00
206	G.D.A.,GKP.	2022.00
207	UPSIC, Kanpur	2022.00
208	GDA, GKP.	2022.00
209	Nagar Palika, Basti	2022.00
210	U.P.Jal Nigam, Gorakhpur	2022.00
211	Nagar Palika, Basti	2022.00
212	do	2022.00
213	do	2022.00
214	do	2022.00
215	B.D.O., Khajini	2022.00
216	G.D.A. GKP.	2022.00
217	PCCIL(L&T), GKP.	2022.00
218	Nagar Palika, Basti	2022.00
219	Nagar Palika, Basti	2022.00
220	Garun Const., GKP.	2022.00
221	Nagar Panchayat, Mehndawal	2022.00
222	Nagar Palika, Basti	2022.00
223	GDA, GKP.	2022.00
224	GDA, GKP.	2022.00
225	GDA, GKP.	2022.00
226	GDA, GKP.	2022.00
227	GDA, GKP.	2022.00
228	GDA, GKP.	2022.00
229	GDA, GKP.	2022.00
230	GDA, GKP.	2022.00
231	Subodh Agrawal, GKP	1911.00
232	Bridge Corporation,GKP.	1911.00
233	GIDA, GKP.	1686.00

234	PCCIL (L&T), GKP.	1686.00
235	DDU, University	1686.00
236	Nagar Palika, Basti	1686.00
237	U.P. Jal Nigam, GKP.	1686.00
238	GIDA, GKP.	1686.00
239	DUDA, Maharajganj	1686.00
240	Anil Yadav,Khirkkiyan, Padrauna, Distt. Kushinagar	1686.00
241	Virendra Kumar Singh, Awas Vikas Colony,Distt Kushinagar	1686.00
242	Yashwant Singh, Vill. Bandi Chhapar P.O. Pakari Buzurg, Distt. Kushinagar	1686.00
243	Promod Kumar Gupta, Tamkuhi Road, Kushinagar	1686.00
244	do	1686.00
245	Dhananjay Tiwari, Pachphera Tiwari Tola, Jarahat Road, Distt. Kushinagar	1686.00
246	Rajesh Chaurasia, Vill. Pakadihar, Purab Patti, Distt. Kushinagar	1686.00
247	NER Gorakhpur	1686.00
248	G.D.A. GKP.	1686.00
249	G.D.A. GKP.	1686.00
250	GIDA, GKP.	1686.00
251	GIDA, GKP.	1686.00
252	PWD, Santkabirnagar	1686.00
253	C.D.O., Basti	1686.00
254	GIDA, GKP.	1686.00
255	RES, GKP.	1686.00
256	T.A.C., GKP.	1686.00
257	GIDA, GKP.	1686.00
258	GIDA, GKP.	1686.00
259	GIDA, GKP.	1686.00
260	G.D.A. GKP.	1686.00
261	U.P. Smaj Kalyan, Siddarthnagar	1686.00
262	EX. Officer, Nagar Panchayat, siswa Bazar	1686.00
263	PWD, Deoria	1686.00
264	PCCIL(L&T), GKP.	1686.00
265	DUDA, Maharajganj	1686.00
266	Subham Const.	1686.00
267	Maa Shail Sheetal Jal , Kushinagar	1686.00
268	Shidhi Vinayak Foods, Kushinagar	1686.00
269	Manjar Sheetal Jal, Kushinagar	1686.00
270	A.K.Interprises, GKP	1686.00
271	M.E.S.,GKP.	1686.00
272	Badal R.O. Water, Kushinagar	1686.00
273	Rajesh R.O. Water, Kushinagar	1686.00
274	G.K. Foods & Beverages, GKP.	1686.00

275	Gharpure Const., Pune	1686.00
276	Gharpure Const., Pune	1686.00
277	Family Pure Drinking Water, GKP.	1686.00
278	Lari Trading Co., Kushinagar	1686.00
279	Hotel Ganesh, GKP.	1686.00
280	Savvy Gardenia	1686.00
281	Hindustan Media, GKP	1686.00
282	Power Grid Corporation,Ballia	1685.00
283	Power Grid Corporation of India GIDA, GKP.	1685.00
284	Power Grid Corporation, Ballia	1685.00
285	Power Grid Corporation of India GIDA, GKP.	1685.00
286	Brij Kishore Singh, Gram Pipri, Kushinagar	1685.00
287	Station Medicare Center, Airforce Station, GKP.	1685.00
288	Sanjay Kumar, Petha Store, Gola Gazar Kasia, GKP.	1685.00
289	Nisar Ahmad,Shetal Jeevan Dhara,P.O. Sindha Patti, Distt. Kushinagar	1685.00
290	Anita Rai, Priya Industries, Vill. Savaya, Kushinagar	1685.00
291	Anita Rai, Priya Industries, Kushinagar	1685.00
292	Akhilesh Singh, P.O.Kubernath, Kushinagar	1685.00
293	Gyaneshwar Malik, Vill. Gulelahi, P.O.Sarya, Distt. Kushinagar	1685.00
294	Aakash Gangajal, Mathauli, Kasia,Kushinagar	1685.00
295	Rajeet Yadav, Captainganj, Kushinagar	1685.00
296	Rajeshwar Gupta, Vill, Pakari, P.O.Sewarahi, Distt. Kushinagar	1685.00
297	Rajesh Kumar, Rajendra Nagar,Purani Bazar,Sewarahi,Kushinagar	1685.00
298	Dinesh Kumar Jaiswal,Vill. Ahirauli Bazar, Kushinagar	1685.00
299	Ramashray Singh, Fazil Nagar, Distt. Kushinagar	1685.00
300	Krishna Neer, Mathauli Bazar,Distt. Kushinagar	1685.00
301	Shradha R.O.Water,Captainganj, Hata, Distt. Kushinagar	1685.00
302	Manoj Interprises, Ram Cola Road, Padrauna, Distt. Kushinagar	1685.00
303	Surya Prakash Sharma, Kasera Tola, Distt. Kushinagar	1685.00
304	Ramapati Tiwari, Tilak Nagar, Padrauna, Distt, Kushinagar	1685.00
305	Dhananjay Tiwari, Vill. Pipra Bhabhi, Distt. Kushinagar	1685.00
306	Abhimanyu Singh,Vill. Sidhuwa Bangar, Distt. Kushinagar	1685.00
307	Hindustan Shuddh Pay Jal Chhawani, Padrauna, Kushinagar	1685.00
308	Sheetal Amritdhara, Ravindra Nagar, Padrauna, Kushinagar	1685.00
309	Manish Kr. Singh, Vill. Semara Harado, Kethkuiyan, Kushinagar	1685.00
310	Shyam Jal, Prop. Anil Khetan, Kasia, Distt. Kushinagar	1685.00
311	CPWD, Maharajganj	1685.00
312	EX. Engineer Conc. Div., Maharajganj	1462.00

313	EX. Engineer Conc. Div., Maharajganj	1462.00
314	DUDA, Maharajganj	1461.00
315	Const Div. PWD, GKP	1349.00
316	Mukh 11 NER Gorakhpur	1349.00
317	Dy Mandal Engineer, NER, Varanasi	1349.00
318	Valmount, Mumbai	1348.00
319	Banke Bihari, GKP.	1348.00
320	Irrigation, Maharajganj	1348.00
321	PWD, Kushinagar	1348.00
322	do	1011.00
323	Nagar Panchayat, Mehndawal	1011.00
324	Udaybhan, gKP	1011.00
325	Nayak Associates	1011.00
326	UPSIC, Kanpur	1011.00
327	P.W.D., Basti	1011.00
328	do	1011.00
329	Nagar Panchayat, Mehndawal	1011.00
330	Nagar Palika, Basti	1011.00
331	P.W.D.,Kushinagar	1011.00
332	Banke Bihari, GKP.	1011.00
333	Nayak Associate	1011.00
334	Sam Traders	1011.00
335	Nagar Palika, Basti	1011.00
336	Nagar Palika, Basti	1011.00
337	Nagar Palika, Basti	1011.00
338	Nagar Palika, Basti	1011.00
339	Nagar Palika, Basti	1011.00
340	Nagar Panchayat, Mehndawal	1011.00
341	Nagar Palika, Basti	1011.00
342	Nagar Panchayat, Mehndawal	1011.00
343	Nagar Palika, Basti	1011.00
344	Nagar Palika, Basti	1011.00
345	Nagar Palika, Basti	1011.00
346	Nagar Palika, Basti	1011.00
347	EX. Engineer G.D.A., GKP.	788.00
348	Swati Const., GKP.	674.00
349	Sumit Electricals	674.00
350	Swati Const., GKP.	674.00
351	Swastik Associates, GKP.	674.00
352	Swati Const., GKP.	674.00
353	Triveni Edu. Trust,GKP.	674.00
354	Swastik Associates, GKP.	674.00

355	Kamadgiri, Gorakhpur	674.00
356	P.W.D.,Kushinagar	674.00
357	PWD, Siddarthnagar	674.00
358	Banke Bihari, GKP.	674.00
359	MES, GKP.	674.00
360	Swati Const., GKP	674.00
361	Swastik Associate	674.00
362	Swastik Associate	674.00
363	Swastik Associate	674.00
364	Swastik Associate	674.00
365	Swastik Associate	674.00
366	Swastik Associate	674.00
367	Swastik Asso.	674.00
368	Swastik Asso.	674.00
369	Swastik Asso.	674.00
370	Swastik Asso.	674.00
371	Swastik Asso.	674.00
372	Swastik Asso.	674.00
373	Kamadgiri, GKP.	674.00
374	PWD, GKP.	674.00
375	PWD, GKP.	674.00
376	U.P. Samaj Kalyan, GKP.	674.00
377	Mahaprabandhak Jalkal Nagar Nigam, GKP.	562.00
378	Mahaprabandhak Jalkal Nagar Nigam, GKP.	562.00
379	Mahaprabandhak Jalkal Nagar Nigam, GKP.	562.00
380	Swastik Associates, GKP.	338.00
381	P.W.D., GKP.	338.00
382	Swastik Associates, GKP.	338.00
383	Arvind Tripathi	338.00
384	Swastik Associates, GKP.	338.00
385	Swati Const., GKP.	338.00
386	U.P. Jal Nigam, Deoria	338.00
387	Irrigation Div. GKP.	338.00
388	N.P.G. College, Barhalganj	338.00
389	Mandi Parishad, GKP.	338.00
390	Swami Vivekanand Trust	338.00
391	PWD, Santkabirnagar	338.00
392	Everest Engg & Contractors	338.00
393	Banke Bihari, GKP.	338.00
394	Banke Bihari, GKP.	338.00
395	Banke Bihari, GKP.	338.00
396	Banke Bihari, GKP.	338.00

397	Swati Const, GKP.	338.00
398	Swastik Associate	338.00
399	Swastik Associate	338.00
400	Swastik Associate	338.00
401	Swastik Associate	338.00
402	Swastik Asso.	338.00
403	Swastik Asso.	338.00
404	Swastik Asso.	338.00
405	Swastik Asso.	338.00
406	Baglajee Ltd.	338.00
407	Ambeshwari Devp.	338.00
408	Triveni Edu. Trust	338.00
409	Baglajee Ltd.	338.00
410	Banke Bihari, GKP.	338.00
411	Bridge Corp., GKP.	338.00
412	Swati Const, GKP.	338.00
413	Balaji, GKP.	338.00
	Total Amount in (Rs.)	**10,108,320.00**

Year 2013-14

S.No	Detail Of Client	Amount
1	9th Division U.P. Irrigation Department, Bahraich	587082.00
2	RES , GKP. Division	207866.00
3	UPRNN, GKP. Unit	152000.00
4	Provincial Div.,U.P.P.W.D.,Maharajganj	97753.00
5	P.W.D.,GKP.	89326.00
6	9th Division U.P. Jal Nigam Gorakhpur	71910.00
7	EX. Engineer, Pro. Div., P.W.D., Gorakhpur (Prabha conc.)	56180.00
8	EX. Engineer, Pro. Div., P.W.D., Gorakhpur (Kadarbh conc.)	56180.00
9	RES , GKP.	50562.00
10	Costruction Division U.P. Jal Nigam, Maharajganj	43259.00
11	Construction Div. U.P.Jal Nigam Kushinagar	33708.00
12	UPRNN, GKP. Unit	18787.00
13	NER, Gonda	3933.00
14	NER, Gonda	3933.00
15	Aditi Conc. Company 14-b Beli Road Katra, Allahabad	2248.00
16	Pasupati infra & Realities Town Hall M.G. Road,	2248.00

	Gorakhpur	
17	EX. Engineer, Pro. Div., P.W.D., Gorakhpur (Kadarbh conc.)	900.00
	Total	**1477875.00**

Year 2012-13

	Detail Of Client	**Amount**
1	UPPCL Unit-19, Azamgarh	879,919.25
2	P.W.D.,GKP.	732844.00
3	U.P. Proj. Corp. LTD., Unit -11, Faizabad	331,183.75
4	EX. Engineer,Drainage Division U.P. Irrigation Department, GKP.	308,472.00
5	G.D.A.,Gorakhpur	306833.00
6	UPSIDC Ltd. , Kanpur	252810.00
7	PMUP Project Corporation Ltd., Unit-29,GKP.	248,665.00
8	U.P. Proj. Corp. LTD., Unit -03, Varanasi	248,011.95
9	C&DS U.P. Jal Nigam, GKP.	222,473.00
10	EX. Engineer (Construction Division), U.P. Jal Nigam Deoria	221,704.00
11	Project Manager, U.P. Project Corporation, Unit-03 Unit-II, Faizabad	150,000.00
12	PGCL (CGL), Ballia	144,914.00
13	PMUP Project Corporation Ltd.,Unit-29,Rapti Nagar Colony, GKP.	144,446.00
14	C&DS, GKP	144400.00
15	C&DS, Azamgarh	144400.00
16	do	144400.00
17	Irrigation Division I, U.P. Irrigation Department, Ballia	123475.00
18	Const. Div. U.P. Jal Nigam, Maharajganj	112,923.00
19	U.P. P.W.D, GKP.	101,124.00
20	U.P. P.W.D., GKP.	101,124.00
21	EX. Engineer, Irrigation Construction Div. Siddarthnagar	100,000.00
22	PMUP Project Corporation Ltd.,Unit-29,GKP.	82,486.00
23	PACCFED, GKP.	82,186.00
24	PACCFED, GKP.	82,186.00
25	PGCL(L&T), Ballia	64,719.00
26	do	62472.00
27	EX. Engineer Project Division-I, U.P. Jal Nigam GKP.	57,180.00
28	U.P. Bridge Corporation, GKP.	52,978.00
29	U.P. Bridge Corporation, GKP.	52,978.00
30	APCO Infratch Ltd.	50562.00
31	Construction Division U.P.Jal Nigam, Balrampur	37,641.00
32	EX. Engineer (Construction Division-I), U.P. Jal Nigam	36,951.00

	Deoria	
33	EX. Engineer P.D. Division U.P. P.W.D., Ballia	35,955.00
34	Prov. Division U.P.P.W.D.,Deoria	35,955.00
35	Irigation Deptt. Maharajganj	29944.00
36	do	29,214.00
37	D&V Solutions, Delhi	28,090.00
38	L&T ECCD, Ibrahimpatti, Ballia	26,289.00
39	L&T Ltd. 2/312 Jnakipuram Extension Lko.	24,720.00
40	PGCL(L&T), Ballia	23,034.00
41	L&T, LKO	21573.00
42	do	21210.00
43	CPWD, GKP	20226.00
44	C&DS Gorakhpur	19439.00
45	do	18,540.00
46	do	18,540.00
47	UPPCL Unit-17, Raebareily	18,272.00
48	L&T, LKO	17247.00
49	PGCIL(Amey Build Tech), Ballia	17135.00
50	PACCFED, GKP	17020.00
51	do	16348.00
52	do	16348.00
53	Joint Magistrate,Siddharthnagar	16067.00
54	Aman Kumar, Gharpure Engg., Pune	15,281.00
55	PGCL (L&T), Ballia	15,000.00
56	PGCL (L&T), Ballia	15,000.00
57	PGCIL(L&T),Sahjanwa,GKP.	14831.00
58	do	14607.00
59	L&T, LKO	14382.00
60	Gemini Paradise	14157.00
61	PGCL, Ballia	13034.00
62	L&T Ltd., Ibrahimpatti, Ballia	12,697.00
63	C&DS U.P. Jal Nigam,GKP.	12,697.00
64	C&DS U.P. Jal Nigam,GKP.	12,697.00
65	do	12,079.00
66	do	12,079.00
67	A.V.N.I.(NH) P.W.D.,GKP.	11,911.00
68	EX. Engineer,Const. Division U.P. Jal Nigam, Maharajganj	11236.00
69	U.P. Jal Nigam Ist Prakalp Khand GKP.	11,236.00
70	U.P. Jal Nigam Ist Prakalp Khand, GKP.	11,236.00
71	U.P. Jal Nigam Unit I,Deoria	11,012.00
72	Vyas Muni PME, Greater Noida	10,281.00
73	PGCL(L&T), Ballia	9,663.00

74	L&T, Ballia	9,494.00
75	Bridge Corporation Unit, GKP.	8,764.00
76	PGCL(CGL), Ballia	8,764.00
77	ECCD Ibrhimpathi, Ballia	8383.00
78	Nagar Palika, Basti	8090.00
79	Bharat Petroleum,GKP.	7,416.00
80	Indian Oil	7416.00
81	P.W.D.,GKP.	7304.00
82	PGCL (CGL), Ballia	7,247.00
83	PGCL(L&T), Ballia	7,247.00
84	U.P Avas Vikas ,LKO	7080.00
85	Construction Div Jal Nigam, Mau	7,079.00
86	PGCL(L&T), Ballia	7,079.00
87	U.P. Avas Vikas, Basti	6,948.00
88	PGCL (CGL), Ballia	6,910.00
89	do	6,910.00
90	do	6,910.00
91	Power Grid (GET),GKP.	6,349.00
92	do	6,349.00
93	Power Grid (GET),GKP.	6,349.00
94	do	6,349.00
95	Section Engineer (Works) NER, Varanasi	6,293.00
96	UPRNN, GKP	6,067.00
97	UPRNN, GKP	6,067.00
98	K.K.Const. GKP.	5842.00
99	do	5,736.00
100	Crompton Greaves Ltd., Ballia	5,731.00
101	EX. Engineer (Construction Division-I), U.P. Jal Nigam Deoria	5,618.00
102	UPRNN, GKP	5,394.00
103	UPRNN, GKP	5,394.00
104	Bharat Petrolium Corporation Ltd., GKP.	5,393.00
105	do	5,393.00
106	do	5,393.00
107	RES, Deoria	5,058.00
108	PGCL(L&T), Ballia	5,056.00
109	do	5,056.00
110	do	5,056.00
111	Dheerendra Kumar Srivastava, Narshinghpur,GKP.	5,056.00
112	PGCL(L&T), GKP	5056.00
113	UPRNN Gorakhpur	5056.00
114	do	5056.00
115	PGCL(CGL), Ballia	4,833.00

116	Gemini Paradise Medical College Road, Gorakhpur	4,551.00
117	GDA GKP	4495.00
118	Nebua Naurangia, Kushinagar	4,412.00
119	UPSIC, GKP.	4,382.00
120	PGCL(L&T), GKP	4382.00
121	PGCL (GET) GKP	4382.00
122	do	4382.00
123	PGCL(GET) Sahjanwa	4,157.00
124	PGB, GKP.	4,045.00
125	L&T, LKO	4045.00
126	do	3820.00
127	GDA, GKP,	3,708.00
128	Nagar Palika Parishad, Basti	3,708.00
129	do	3,708.00
130	do	3,708.00
131	do	3,708.00
132	do	3,708.00
133	GDA, GKP,	3,707.00
134	EX. Engineer GDA, GKP.	3,640.00
135	do	3,640.00
136	Sri Promod Kumar,Thana Baansgaon, GKP.	3,540.00
137	PCGL, Sec-23,GIDA	3,540.00
138	do	3,540.00
139	PGCL (L&T), Ballia	3,540.00
140	do	3,540.00
141	PGCL (L&T), Ballia	3,540.00
142	U.P Avas Vikas ,LKO	3540.00
143	CPWD , GKP (M/s Awdes Mishra &co.)	3540.00
144	do	3540.00
145	PGCL(L&T), GKP	3540.00
146	UPSIC Ltd, GKP.	3,371.00
147	Construction Div II Jal Nigam, Deoria	3,371.00
148	do	3,371.00
149	do	3,371.00
150	Dasam Khand Jal Nigam GKP.	3,371.00
151	UPRNN,Civil Line, GKP.	3,371.00
152	L&T Lt. ECC Division-2/312 Jankpuram Extension, LKO	3147.00
153	EX. Engineer GDA, GKP.	3,034.00
154	EX. Engg. Prov. DIV. PWD, Maharajganj	3,034.00
155	Nagar Panchayat, Mehndawal	3034.00
156	PGCIL(L&T),Sahjanwa,GKP.	3034.00
157	PGCL(L&T), GKP	3033.00

158	Rajya Krishi Utpadan Mandi Parisad, Basti	2,978.00
159	EX. Engineer GDA, GKP.	2,978.00
160	Crompton Greaves Ltd., Ballia	2,922.00
161	do	2,921.00
162	L&T Ltd., ECCD,Ibrahimpatti, Ballia	2,920.00
163	PWD GKP	2809.00
164	PGCL (CGL), Ballia	2,697.00
165	Power Grid (GET),GKP.	2,697.00
166	Power Grid (GET),GKP.	2,697.00
167	K.K.Const. GKP.	2697.00
168	do	2,585.00
169	do	2585.00
170	do	2585.00
171	Techno Electrical And Engg. Co. Ltd., Kolkatta	2,416.00
172	Aman Kumar, Gharpure Engg., Pune	2,416.00
173	PGCL(CGL), Ballia	2,416.00
174	PGCL (L&T), Ballia	2,416.00
175	PGCL (L&T), Ballia	2,416.00
176	EX. Engineer PWD, Kushinagar	2,360.00
177	Kamadgiri Dev,GKP.	2360.00
178	PGCL(CGL), Ballia	2,304.00
179	PGCL (GET) Ballia	2303.00
180	Aditya Builders 4-D, Beli Road New Katra,Allahabad	2,251.00
181	Singh Enterprises 50, M.I.G Road A.D.A Colony, Allahabad	2248.00
182	do	2,247.00
183	Singh Interprises J.V.,Allahabad	2206.00
184	Nagar Panchayat, Nichlaul	2022.00
185	GDA, GKP,	2,022.00
186	PCAAFED, GKP.	2,022.00
187	GDA, GKP.	2,022.00
188	GDA,GKP.	2,022.00
189	GDA, GKP.	2,022.00
190	GDA, GKP.	2,022.00
191	GDA, GKP.	2,022.00
192	GDA,GKP.	2,022.00
193	GDA, GKP.	2,022.00
194	GDA, GKP.	2,022.00
195	GDA, GKP.	2,022.00
196	GDA GKP	2022.00
197	Nagar Panchayat, Mehndawal	2022.00
198	TAC, GKP	1,696.00
199	TAC, GKP	1,696.00

200	Mukhalaya II,GKP	1,689.00
201	Eastern Construction Company, Srinagar,Alambaag, Lko.	1,686.00
202	GDA, GKP.	1,686.00
203	Jal Nigam, GKP.(Gharpure)	1,686.00
204	D.D.U. Gorakhpur University	1,686.00
205	R.K.Filling, Mahajganj	1,686.00
206	UPSIC,GKP.	1,686.00
207	Jal Nigam, GKP.(Gharpure)	1,686.00
208	D.D.U. Gorakhpur University	1,686.00
209	R.K.Filling, Mahajganj	1,686.00
210	UPSIC,GKP.	1,686.00
211	Jai Prakash Prasad Bholajepuram, Basharatpur,GKP.	1,686.00
213	Annapurna Jaldhar New Colony,Madhopur,GKP.	1,686.00
214	MES GE(A.F.),GKP.	1,686.00
215	M.P. Public School, Anand Nagar, Maharajganj	1,686.00
216	P.W.D GKP	1686.00
217	PGCL (GET) GKP	1686.00
218	UPSIC GKP	1686.00
219	UPSIC GKP	1686.00
220	do	1686.00
221	GIDA Gorakhpur	1686.00
222	Shriram H.P , Kushinagar	1686.00
223	P.W.D.,GKP.	1686.00
224	Construction Unit PWD, GKP.	1,685.00
225	GDA, GKP,	1,685.00
226	GDA, GKP,	1,685.00
227	Lotus Nikko Hotel Buddha Marg, Kushinagar	1,685.00
228	Inderjeet Kushuwaha Kasia,Kushinagar	1,685.00
229	Govt. Of India, C.P.W.D.,Nautanwa	1,685.00
230	U.P.C. Ltd.,Faizabad	1,685.00
231	Suyesh Institute of Information Technology, Hakkabad, GKP.	1,655.00
232	City Mall Golghar, GKP.	1,655.00
233	Crazy Snakes Private Ltd. GIDA,GKP.	1,655.00
234	MES Garrision Engineer (A.F.),GKP.	1,655.00
235	MES Garrision Engineer (A.F.),GKP.	1,655.00
236	L&T, Ballia, Unit	1,348.00
237	Nirman-1, NER,GKP.	1,348.00
238	Eastern Const. LKO.	1,348.00
239	Eastern Const. LKO.	1,348.00
240	Sumeet Electrical,Lko.	1348.00
241	Power Grid Corp.,Ballia	1,123.00

242	IOCL, GKP.	1,011.00
243	Singh Interlocking Industries,Pipri Badi, Kushinagar	1,011.00
244	Hariom Interlocking Brick Udyog, Kushinagar	1,011.00
245	R.K. Construction Pvt. Ltd. Lucknow	1,011.00
246	IOCL, GKP.	1,011.00
247	Subham Construction Company, Mahrikhanva, Basti	1,011.00
248	Om Enterprises, Atraura, Gola, GKP.	1,011.00
249	Subham Construction Company, Mahrikhanva, Basti	1,011.00
250	V.P. Singh, GKP	1,011.00
251	Aman Kumar, Gharpure Engg., Pune	1,011.00
252	Jal Nigam, GKP	1,011.00
253	Jal Nigam (Bala ji), GKP.	1,011.00
254	Eastern Const. Lko.	1,011.00
255	Brahmputra Interprises, GKP.	1,011.00
256	Purvanchal Traders, Padrauna	1,011.00
257	Apolo Petro, LKO.	1,011.00
258	U.P. Jal Nigam, Deoria	1,011.00
259	PGCL (L&T), Ballia	1,011.00
260	Brahmputra Interprises, GKP.	1,011.00
261	Purvanchal Traders, Padrauna	1,011.00
262	Apolo Petro, LKO.	1,011.00
263	U.P. Jal Nigam, Deoria	1,011.00
264	PGCL (L&T), Ballia	1,011.00
265	BPCL GKP	1011.00
266	BPCL GKP	1011.00
267	BPCL GKP	1011.00
268	Aditya Enterprises	1011.00
269	Shyam filling station, Gorakhpur	1011.00
270	Jaiswal Trans, Deoria	1011.00
271	Shyam filling station, Gorakhpur	1011.00
272	Deepak Srivastav, Jamshedpur	1011.00
273	Supertiles	1011.00
274	DUDA,Sant Kabir Nagar	1011.00
275	Nagar Palika,Khalilabad	1011.00
276	Sundaram Infra Zone,GKP.	1011.00
277	UPSIC, GKP.	1011.00
278	Bridge Corporation Unit, GKP.	674.00
279	Bridge Corporation Unit, GKP.	674.00
280	U.P. Jal Nigam Unit I,Deoria	674.00
281	Aman Kumar, Gharpure Engg., Pune	674.00
282	RITES Ltd.	674.00
283	RITES Ltd.	674.00

284	Chief EX. Officer, GIDA, GKP.	674.00
285	Aman Kumar (Gharpure)	674.00
286	Aman Kumar (Gharpure)	674.00
287	Gemini Paradise,GKP.	674.00
288	Aman Kumar (Gharpure)	674.00
289	Aman Kumar (Gharpure)	674.00
290	Gemini Paradise,GKP.	674.00
291	Eastern Const. Co	674.00
292	Swastik Associate, Gorakhpur	674.00
293	Sumeet Electrical Lucknow	674.00
294	Rahul Lal Srivastava	674.00
295	Jalkal Nagar Nigam,GKP.	562.00
296	Jalkal Nagar Nigam,GKP.	562.00
297	do	562.00
298	Jalkal Nagar Nigam,GKP.	562.00
299	Jalkal Nagar Nigam,GKP.	562.00
300	Jalkal Nagar Nigam, GKP.	555.00
301	Jalkal Nagar Nigam, GKP.	555.00
302	Power Grid Corp., Ibrahimpatti, Ballia	515.00
303	Rameshwar Kurjekar Engr.(Civil) RITES Ltd., GKP.	338.00
304	Rameshwar Kurjekar Engr.(Civil) RITES Ltd., GKP.	338.00
305	Aman Kumar, Gharpure Engg., Pune	338.00
306	Jal Nigam, GKP	338.00
307	Jal Nigam, GKP.	338.00
308	Aman Kumar, Gharpure Engg., Pune	338.00
309	Aman Kumar, Gharpure Engg., Pune	338.00
310	Jal Nigam (Bala ji), GKP.	338.00
311	Verma construction,GKP.	338.00
312	Jal Nigam (Bala ji), GKP.	338.00
313	Eastern Const. LKO.	338.00
314	Eastern Const. LKO.	338.00
315	UPSIC GKP	338.00
316	Gemini Paradise	338.00
317	Gemini Paradise	338.00
318	Sarraj Builders,GKP.	338.00
319	PGCIL(L&T),Sahjanwa,GKP.	338.00
320	Swastik Associate,GKP	338.00
	Total	**7198230.95**

5.10 Faculty Interaction with Outside World (10)

FIP = Faculty interaction points
Assessment = 2 × (Sum of FIP by each faculty member)/N

(Instruction: A faculty member gets maximum five interaction points, depending upon the type of institution or R&D laboratory or industry, as follows)

Five points for interaction with a reputed institution abroad, institution of eminence in India, or national research laboratories, Three points for interaction with institution/industry (not covered earlier).

Points to be awarded, for those activities, which result in joint efforts in publication of books/research paper, pursuing externally funded R&D / consultancy projects and/or development of semester-long course / teaching modules.

To facilitate Faculty interaction with outside world the University has signed the Memorandum of Understanding with the following institutes:

- MoU between CSIR-NEERI, Nagpur and MMMUT, Gorakhpur
- MoU between National Institute of Hydrology, Roorkee and MMMUT, Gorakhpur
- MoU between CSMRS, New Delhi and MMMUT, Gorakhpur

A total of maximum five selected students out of M.Tech in the respective areas of specialization are allowed for project work at these institutes. The students work in the areas of mutually agreeable subject areas identified by both the institutes.

Name of the faculty (contributing to FIP)	FIP		
	CAYm2	CAYm1	CAY
Dr . S.M. Ali Jawaid	5		
Dr. R.K. Shukla			
Dr. Shri Ram			
Shri Ram Dular			
Shri S.N. Choudhary			
Dr. Govind Pandey	5	5	
Dr.Arun Kumar Mishra			
Mr.Dilip Kumar			
Ms.Sana Zafar		5	
Sum	10	10	0
N	15	16	16
Assessment FIP = 2x Sum/N	1.33	1.25	0.00
		Average Assessment	0.86

VI. Facilities and Technical Support (75)

Description of classrooms, faculty rooms, seminar, and conference halls: (Entries in the following table are sampler entries)

6.1 *Classrooms in the Department (20)*

6.1.1 Adequate number of rooms for lectures (core/electives), seminars, tutorials, etc., for the program (10)

Room Description	Usage	Shared / Exclusive ?	Capacity	Rooms Equipped with
CE-101	Class room for 3rd year	Exclusive	80	Black /White Board and Seating arrangements
CE-102	Class room for 4th year	Exclusive	80	Black /White Board and Seating arrangements
CE-103	Class room for Tutorials	Shared	90	Black /White Board and Seating arrangements
CE-109	Class room for 2nd year	Exclusive	80	Black /White Board and Seating arrangements
CE-202	Classroom for M. Tech	Exclusive	25	Black /White Board and Seating arrangements
Seminar Room	For seminars	Exclusive	100	Black /White Board and Seating arrangements,audio system,podium,internet.
New Seminar Room	For seminars	Exclusive	150	Black /White Board and Seating arrangements,audio system,podium,internet.
HCED Room	For Departmental Meetings	Exclusive	20	Seating arrangements, white board,Internet and PC,Printer,Xerox Machine
Faculty rooms (n) 11	For Faculty	Exclusive	01	PC, Internet, Book rack,Almirah,whiteboard,TableLamp,Seating arrangement
CE-112	Departmental Library	Exclusive	15	Seating Arrangements,Book shelves

(Instruction: Assessment based on the information provided in the preceding table.)

6.1.2 Teaching aids---multimedia projectors, etc. (5)
(Instruction: List the various teaching aids available)

- Projectors
- Audio system
- Wooden Models
- Maps and Aerial Photographs
- Black/white-boards fitted

6.1.3 Acoustics, classroom size, conditions of chairs/benches, air circulation, lighting, exits, ambience, and such other amenities/facilities (5)
(Instruction: Assessment based on the information provided in the preceding table and the inspection thereof.)

Room Description	Capacity	Rooms Equipped with	Condition of Amenities	Ambience
CE-101	80	Black /White Board and Seating arrangements	Acoustics-Curtains Excellent chairs/benches	Across ventilation and proper lighting
CE-102	80	Black /White Board and Seating arrangements	Acoustics-Curtains Excellent chairs/benches	Across ventilation and proper lighting
CE-103	90	Black /White Board and Seating arrangements	Acoustics-Curtains Excellent chairs/benches	Across ventilation and proper lighting
CE-109	80	Black /White Board and Seating arrangements	Acoustics-Curtains Excellent chairs/benches	Across ventilation and proper lighting
CE-202	25	Black /White Board and Seating arrangements	Acoustics-Curtains Excellent chairs/benches	Across ventilation and proper lighting
Seminar Room	100	Black /White Board and Seating arrangements,audiosystem,podium,internet.	Acoustics-Curtains Excellent chairs/benches	Across ventilation and proper lighting
New Seminar Room	150	Black /White Board and Seating arrangements,audiosystem,podium,internet.	Acoustics-Curtains Excellent chairs/benches	Across ventilation and proper lighting

Faculty rooms (n) 11	01	PC, Internet, Book rack,Almirah,whiteboard,TableLamp,Seating arrangement	Acoustics-Curtains Excellent chairs/benches	Across ventilation and proper lighting
HCED Room	20	Seating Arrangements,Book shelves	Acoustics-Curtains Excellent chairs/benches	Across ventilation and proper lighting

6.2 Faculty Rooms in the Department (15)

6.2.1 Availability of individual faculty rooms (5)
(Instruction: Assessment based on the information provided in the preceding table.)

No. of faculty rooms in the department: 11
Facilities in Faculty rooms:

- PC
- Internet
- Almirah
- Table
- Officer's Chair + three chairs
- Table Lamp
- White Board
- CUG mobile phones
- Power Backup 24x7

6.2.2 Room equipped with white/black board, computer, Internet, and such other amenities/facilities (5)
(Instruction: Assessment based on the information provided in the preceding table)

Rooms are equipped with white/black board, computer, internet, etc

6.2.3 Usage of room for counselling/discussion with students (5)
(Instruction: Assessment based on the information provided in the preceding table and the inspection thereof.)

Depending upon the need following venue are utilized for counseling by the teachers:

- Faculty Room
- Seminar Room
- Departmental Library

6.3 Laboratories in the Department to meet the Curriculum Requirements and the POs (25)

6.3.1 Adequate, well-equipped laboratories to meet the curriculum requirements and the POs (10)

Curriculum Lab Description	**Exclusive use/Shared**	**Space(sq.m),**	**Number of experiment**	**Qualify of instrument**	**Lab manuals**

	?	Number of Students	s	s	
Environmental and Public Health Engineering	Exclusive	165,30	Sufficient as per curriculum	Satisfactory	Available
Geology/Engineering Geology	Exclusive	105,30	Sufficient as per curriculum	Satisfactory	Available
Geotechnical/geo-environmental Engg	Exclusive	210,30	Sufficient as per curriculum	Satisfactory	Available
Hydraulic Engineering	Exclusive	150,30	Sufficient as per curriculum	Satisfactory	Available
Structural & Concrete Engg	Exclusive	245,30	Sufficient as per curriculum	Satisfactory	Available
Surveying	Exclusive	35,30	Sufficient as per curriculum	Satisfactory	Available
Transportation Engg	Exclusive	70,30	Sufficient as per curriculum	Satisfactory	Available
CAD Lab	Exclusive	52,30	Sufficient as per curriculum	Satisfactory	Available
Mechanics Lab	Exclusive	70,30	Sufficient as per curriculum	Satisfactory	Available

(Instruction: Assessment based on the information provided in the preceding table.)

6.3.2 Availability of computing facilities in the department (5)

YES, Computers are provided to each faculty member

(Instruction: Assessment based on the information provided in the preceding table.)

6.3.3 Availability of laboratories with technical support within and beyond working hours (5)

YES

(Instruction: Assessment based on the information provided in the preceding table.)

6.3.4. Equipment to run experiments and their maintenance, number of students per experimental setup, size of the laboratories, overall ambience, etc. (5)

(Instruction: Assessment based on the information provided in the preceding table.)

Curriculum Lab Description	Space(sq.m), Number of Students	No. of Experiments	No. of students per experimental Setup	Conditions of Equipments
Environmental and Public Health Engineering	165,30	12	4/5 students	Satisfactory
Geology/Engineering Geology	105,30	5	4/5 students	Satisfactory
Geotechnical/geo-environmental Engg	210,30	12	4/5 students	Satisfactory
Hydraulic Engineering	150 per 35	10+7	4/5 students	Satisfactory
Structural & Concrete Engg	245 per 35	5+6	4/5 students	Satisfactory
Surveying	35 per 35	9+6	4/5 students	Satisfactory
Transportation Engg	70 per 35	11	4/5 students	Satisfactory
CAD Lab	52 per 35	3+4	4/5 students	Satisfactory

6.4. Technical Manpower Support in the Department (15)

Name of the Tech. Staff	Designation	Pay-scale (in Rs.)	Exclusive / Shared Work?	Date of Joining	Qualification		Other Technical Skills gained?	Responsibility
					At Joining	Now?		
Sri Ashutosh Tripathi	S.L.T.	9300-34800	Exclusive	29.06.2009	Diploma in Civil Engg.	-do-	Nil	Lab Management
Sri Rajeev Kr Srivastava	Draught's Man	5200-20200	Exclusive	20.10.1997	Certificate in Draught's Civil	B.A.	Nil	Computer Aided Drafting
Sri Ashok Kr Yadav	Lab Assistant	5200-20200	Exclusive	04.01.1995	Intermediate	-do-	Nil	Lab Management
Sri Ashwini Mishra	Lab Assistant	(5200-20200	Exclusive	06.06.2003	Intermediate	Diploma i Microwav Satellite Communi n	O level	Lab Management

6.4.1. Availability of adequate and qualified technical supporting staff for programme-

specific laboratories (10)

YES

Name of the Tech. Staff	Designation	Qualification		Responsibility
		At Joining	Now?	
Sri Ashutosh Tripathi	S.L.T.	Diploma in Civil Engg.	AMIE. Civil Engineering	Lab Management
Sri Rajeev Kr Srivastava	Draught's Man	Certificate in Draught's Civil	B.A.	Computer Aided Drafting
Sri Ashok Kr Yadav	Lab Assistant	Intermediate		Lab Management
Sri Ashwini Mishra	Lab Assistant	Intermediate	Diploma in Microwave & Satellite Communication	Lab Management

(Instruction: Assessment based on the information provided in the preceding table.)

6.4.2. Incentives, skill-upgrade, and professional advancement (5)

SATISFACTORY

(Instruction: Assessment based on the information provided in the preceding table.)

VII. Academic Support Units and Teaching-Learning Process (75)

Students' Admission

Admission intake (for information only)

Item	CAY 2015-16	CAYm1 2014-15	CAY*m*2 2013-14	CAY*m*3 2012-13
Sanctioned intake strength in the institute (*N*)	600+30*+1#	330+17*	330+16*	330+17
Number of students admitted on merit basis (*N*1)	631	347	346	347
Number of students admitted on management quota/otherwise (*N*2)	08$	13$	14$	12$
Total number of admitted students in theinstitute *(N1 + N2)*	639	360	360	359

*Supernumerary Tuition Fee Waiver Seats as per AICTE norms: Not Considered for calculations

#Supernumerary seats for Kashmiri Migrants as per Government of India norms: Not Considered for calculations

$ Supernumerary seats filled by Government of India for North-East states. This number is not fixed. Not considered for calculations

(Instruction: The intake of the students during the last three years against the sanctioned capacity may be reported here.)

Admission quality (for information only)

Divide the total admitted ranks (or percentage marks) into five or a few more meaningful ranges

Rank range	CAY 2015-16	CAYm1 2014-15	CAY*m*2 2013-14	CAY*m*3 2012-13
01-200	30	68	0	27
201-500	111	137	3	16
501-1000	185	52	0	8
1001-2000	121	26	55	32
2001-10000	164	54	207	184
More than 10000	18	8	82	80
Admitted without rank	----			

(Instruction: The admission quality of the students in terms of their ranks in the entrance examination may be presented here.)

Tabular data for estimating student-teacher ratio and faculty qualification for first year common courses

List of faculty members teaching first year courses: **(2013-14)**

Name of faculty member	Qualification	Designation	Date of joining the institution	Department with which associated	Distribution of teaching load (%)		
					1st year	UG	PG
Dr. Arjun Dubey	M.A., Ph.D.	Associate Professor	02-06-1986	Applied Sciences	100	0	0
Dr. D.K. Dwivedi	M.Sc., Ph.D.	Associate Professor	03-07-2009	Applied Sciences	64	36	0
Dr. D. Kandu	M.Sc., Ph.D.	Assistant Professor	22-02-1999	Applied Sciences	0	100	0
Dr. B.K. Pandey	M.Sc., Ph.D.	Assistant Professor	22-02-1999	Applied Sciences	100	-	-
Dr. P.P. Pande	M.Sc., Ph.D.	Assistant Professor	13-05-2002	Applied Sciences	100	0	0
Dr. S.P. Singh	M.Sc., Ph.D.	Assistant Professor	03-07-2009	Applied Sciences	81	19	
Dr. Mahendra Singh	M.Sc., Ph.D.	Contractual Faculty	July, 2013	Applied Sciences	100	0	0
Dr. Harsha Pandey	M.Sc., Ph.D.	Contractual Faculty	July, 2013	Applied Sciences	30	70	0
Dr. Shradha Srivastava	Ph.D.	Contractual Faculty	July ,2014	Applied Sciences	100	0	0
Dr. H . K. Mishra	Ph.D.	Contractual Faculty	July ,2014	Applied Sciences	100	0	0
Dr. V. K. Pandey	Ph.D.	Contractual Faculty	July ,2014	Applied Sciences	100	0	0
Sri Arun Kumar Mishra	M.Tech	Assistant Professor	30th July 2009	Civil Engineering	30	50	20
Sri Abhishek Singh	B.Tech	Guest Faculty	July '13	Civil Engineering	100	0	0
Sri Amit Chaubey	B.Tech	Guest Faculty	July '13	Civil Engineering	14	86	0
Prof. V.K. Giri	Ph.D.	Professor	15/09/1989	Electrical Engineering	18	45	37
Dr. S.K. Srivastava	Ph.D.	Associate Professor	23/01/1988	Electrical Engineering	14	64	22
Dr. A.K. Pandey	Ph.D.	Associate Professor	15/09/1989	Electrical Engineering	50	22	28
Mr. K.P. Singh	M.Tech	Associate Professor	12/8/1983	Electrical Engineering	14	57	29
Ms. Arushi Singh	M.Tech	Contractual Faculty	July,2013	Electrical Engineering	44	56	0
Ms. Sweta Singh	M.Tech	Contractual Faculty	July, 2013	Electrical Engineering	56	44	0
Mr. R.K. Patel	M.Tech	Research cum Teaching fellow	June,2013	Electrical Engineering	80	20	0
Mr. Pramendra	B.Tech	Contractual Faculty	15th July'15	Civil Engineering	17	83	0

Mr. Yashwant Gupta	B.Tech	Contractual Faculty	15th July'15	Civil Engineering	57	43	0
Mr. Vijyendra	B.Tech	Contractual Faculty	15th July'15	Civil Engineering	19	81	0
Dr. Ritu Srivastava	Ph.D	Contractual Faculty	15th July'15	Applied Sciences	100	0	0
Dr.V.K.Pandey	Ph.D	Contractual Faculty	15th July'15	Applied Sciences	25	75	0
Sri.R.D.Pandey	M.Tech	Contractual Faculty	July, 2013	Electronics & Comm. Engg.	93	07	0
Mr.A.K.Patel	M.Tech	Contractual Faculty	July, 2013	Computer Science &Engg.	23	15	62
Mr. Rajkumar	M.Tech	Contractual Faculty	July, 2013	Computer Science &Engg.	100	0	0
Ms. Ayushi Srivastava	B.Tech	Contractual Faculty	July, 2013	Computer Science &Engg.	84	16	0
Dr. Pramod Prasad	Ph.D.	Professor		Mechanical Engg.	100	0	0
Mr. L.B. Singh	M.Tech	Guest Faculty (Rtd)	July'13	Mechanical Engg.	43	28	29
Dr. Narendra Singh	Ph.D.	Guest Faculty (Rtd)	July'13	Mechanical Engg.	71	00	29
Dr S. K. Srivastava	Ph.D.	Associate Professor		Mechanical Engg.	14	72	14
Dr S. C. Jayswal	Ph.D.	Associate Professor		Mechanical Engg.	23	31	46
Mr. R.N. Mall	MSc.	Assistant Professor	19/11/1996	Mechanical Engg.	27	46	27
Mr Anurag Srivastava	M.Tech	Guest Faculty	July'13	Mechanical Engg.	50	39	11
Mr Shah FatehAzam	M.Tech	Guest Faculty	July'13	Mechanical Engg.	33	34	33
Mr. S. P. Tripathi	B.Tech	Guest Faculty	July'13	Mechanical Engg.	50	50	00
Mr A.K. Srivastava	B.Tech	Guest Faculty	July'13	Mechanical Engg.	68	32	00
Sri Meraj Ahmed	B.Tech, MBA	Guest Faculty	July'13	Mechanical Engg.	28	72	0
Mr. Hasan Nadeem	B.Tech	Guest Faculty	July'13	Mechanical Engg.	11	89	0
Mr. Sachin Kumar	B.Tech	Guest Faculty	July'13	Mechanical Engg.	30	70	0
Mr. Asit Shukla	B.Tech	Guest Faculty	July'13	Mechanical Engg.	35	65	0

List of faculty members teaching first year courses: **2014-15**

Name of faculty member	Qualification	Designation	Date of joining the institution	Department with which associated	Distribution of teaching load (%)		
					1st year	UG	PG
Dr. Arjun Dubey	M.A., Ph.D.	Associate Professor	02-06-1986	Applied Sciences	100	0	0
Dr. D.K. Dwivedi	M.Sc., Ph.D.	Associate Professor	03-07-2009	Applied Sciences	64	36	0
Dr. B.K. Pandey	M.Sc., Ph.D.	Assistant Professor	22-02-1999	Applied Sciences	100	-	-
Dr. P.P. Pande	M.Sc., Ph.D.	Assistant Professor	13-05-2002	Applied Sciences	100	0	0
Dr. S.P. Singh	M.Sc., Ph.D.	Assistant Professor	03-07-2009	Applied Sciences	81	19	
Dr. A. K. Baranwal	M.Sc., Ph.D.	Assistant Professor	03-02-2015	Applied Sciences	78	0	22
Dr. Harish Chandra	M.Sc., Ph.D.	Assistant Professor	10-02-2015	Applied Sciences	78	0	22
Dr. Shradha Srivastava	Ph.D.	Contractual Faculty	July ,2014	Applied Sciences	100	0	0
Dr. H . K. Mishra	Ph.D.	Contractual Faculty	July ,2014	Applied Sciences	100	0	0
Dr. V. K. Pandey	Ph.D.	Contractual Faculty	July ,2014	Applied Sciences	100	0	0
MS. Amrita Sharma	M. Sc,	Research cum Teaching fellow	Jan ,2014	Applied Sciences	100	0	0
Ms. Vandita Rao	M. Sc,	Research cum Teaching fellow	July ,2014	Applied Sciences	100	0	0
Sri Arun Kumar Mishra	M.Tech	Assistant Professor	July, 2009	Civil Engineering	30	50	20
Sri Abhishek Singh	B.Tech	Guest Faculty	July, 2014	Civil Engineering	100	0	0
Sri Shravan Kumar Jaiswal	B.Tech	Guest Faculty	July, 2014	Civil Engineering	33	66	
Mr. K.B. Sahay	M.Tech	Assistant Professor	16/1/2015	Electrical Engineering	39	61	0
Prof. V.K. Giri	Ph.D.	Professor	15/09/1989	Electrical Engineering	18	46	36
Dr. S.K. Srivastava	Ph.D.	Associate Professor	23/01/1988	Electrical Engineering	14	65	21
Dr. A.K. Pandey	Ph.D.	Associate Professor	15/09/1989	Electrical Engineering	43	28	29
Ms. Amrita Singh	M.Tech	Contractual Faculty	5/2/2014	Electrical Engineering	18	82	0
Mr. Siraj Ahmad	M.Tech	Contractual Faculty	July,2014	Electrical Engineering	09	91	0

Mr. Tej Prakash Verma	M.Tech	Contractual Faculty	July,2014	Electrical Engineering	14	86	0
Mr. R.K. Patel	M.Tech	Research cum Teaching fellow	June,2013	Electrical Engineering	10	90	0
Mr. Prafull Chauhan	M.Tech	Research cum Teaching	July,2014	Electrical Engineering	50	50	0
Mr. Anurag Divedi	M.Tech	Research cum Teaching	July,2014	Electrical Engineering	26	74	0
Mr. Pramendra	B.Tech	Guest Faculty	15th July'15	Civil Engineering	17	83	0
Mr. Yashwant Gupta	B.Tech	Guest Faculty	15th July'15	Civil Engineering	57	43	0
Mr. Vijyendra	B.Tech	Guest Faculty	15th July'15	Civil Engineering	19	81	0
Dr. Ritu Srivastava	Ph.D	Guest Faculty	15th July'15	Applied Sciences	100	0	0
Dr.V.K.Pandey	Ph.D	Guest Faculty	15th July'15	Applied Sciences	25	75	0
Sri.R.D.Pandey	M.Tech	Associate Prof. (Retd.)	July'15	Electronics & Comm. Engg.	100	0	0
Ms. Savita	B. Tech	Contractual Faculty	July, 2014	Electronics & Comm. Engg.	44	56	0
Mr. Chandan	M. Tech	Research cum Teaching Fellow	July, 2013	Electronics & Comm. Engg.	40	60	0
Ms. Srishti Singh	M. Tech	Contractual Faculty	July, 2014	Electronics & Comm. Engg.	25	75	0
Ms. Jyoti Mishra	B. Tech	Contractual Faculty	July, 2014	Electronics & Comm. Engg.	25	75	0
Mr. S. P. Tripathi	B.Tech	Guest Faculty	July'14	Mechanical Engg.	33	67	0
Mr. D. K. Dubey	M.Tech	Guest Faculty	July'14	Mechanical Engg.	33	67	0
Sri Hasan Nadeem	B.Tech	Guest Faculty	July'14	Mechanical Engg.	15	85	0
Sri Durga Prasad	M.Tech	Guest Faculty	July'14	Mechanical Engg.	44	56	0
Sri Meraj Ahmed	B.Tech, MBA	Guest Faculty	July'14	Mechanical Engg.	54	46	0
Dr. P.K. Singh	Ph.D.	Associate Professor	01/04/1989	Computer Science &Engg.	16	52	32
Dr. S.P. Singh	Ph.D.	Associate Professor	16/04/1994	Computer Science &Engg.	11	28	61
Mr. M. Hassan	M.Tech	Assistant Professor	28/05/2003	Computer Science &Engg	15	30	55
Mr. Yashpal	M.Tech	Research cum	January, 2014	Computer Science &Engg	81	0	19

		Teaching Fellow					
Mr. Anajey Mani Tripathi	M.Tech	Research cum Teaching Fellow	January, 2014	Computer Science &Engg	81	19	0
Ms. Sachi Mall	M.Tech	Research cum Teaching Fellow	August, 2013	Computer Science &Engg	100	0	0
Mr.A.K.Patel	M.Tech	Contractual Faculty	July,2015	Computer Science &Engg.	38	51	11

List of Faculty Members Teaching First Year Courses: **2015-16**

Name of faculty member	**Qualification**	**Designation**	**Date of joining the institution**	**Department with which associated**	**Distribution of teaching load (%)**		
					1st year	**UG***	**PG**
Dr. Arjun Dubey	M.A., Ph.D.	Associate Professor	02-06-1986	Applied Sciences	100	-	-
Dr. D.K. Dwivedi	M.Sc., Ph.D.	Associate Professor	03-07-2009	Applied Sciences	64	36	0
Dr. D. Kandu	M.Sc., Ph.D.	Assistant Professor	22-02-1999	Applied Sciences	0	100	0
Dr. B.K. Pandey	M.Sc., Ph.D.	Assistant Professor	22-02-1999	Applied Sciences	100	-	-
Dr. P.P. Pande	M.Sc., Ph.D.	Assistant Professor	13-05-2002	Applied Sciences	100	0	0
Dr. S.P. Singh	M.Sc., Ph.D.	Assistant Professor	03-07-2009	Applied Sciences	81	19	-
Dr. A. K. Baranwal	M.Sc., Ph.D.	Assistant Professor	03-02-2015	Applied Sciences	78	0	22
Dr. Harish Chandra	M.Sc., Ph.D.	Assistant Professor	10-02-2015	Applied Sciences	60	18	22
Dr. Krishna Kumar	Ph.D	Assistant Professor	07-09-2015	Applied Sciences	100	0	0
Mr. Ravi Kumar Gupta	MA, NET	Assistant Professor	01-09-2015	Applied Sciences	0	100	0
Kumar Vinit	M.Sc	Contractual Faculty	August, 2015	Applied Sciences	15	45	40
Asmita Mishra	M.Sc	Contractual Faculty	August, 2015	Applied Sciences	20	25	55
HarshaPande	Ph. D	Contractual Faculty	August, 2015	Applied Sciences	30	35	35
Priti Pathak	M. Sc	Research cum Teaching Fellow	August, 2015	Applied Sciences	100	0	0
Dr. Prabhunath	Ph. D	Contractual	August,	Applied	80	20	0

		Faculty	2015	Sciences			
Dr. Pradutt Kumar Bharti	Ph. D	Contractual Faculty	August, 2015	Applied Sciences	80	20	0
Mr .Dipendra Sharma	M.Sc., NET	Contractual Faculty	August, 2015	Applied Sciences	80	20	0
MsVandita Rao	M. Sc	Research cum Teaching Fellow	July, 2014	Applied Sciences	80	20	0
Mr Praveen Kumar Singh	M. Sc	Research cum Teaching Fellow	August, 2015	Applied Sciences	100	0	0
Dr. Ritu Srivastava	Ph.D	Contractual Faculty	July,2015	Applied Sciences	80	20	0
Dr.V.K.Pandey	Ph.D	Contractual Faculty	July, 2015	Applied Sciences	25	75	0
Ms. Anamica	M.Sc.	Research cum Teaching Fellow	July,2015	Applied Sciences	100	0	0
Ms. Amrita Sharma	M.Sc.	Research cum Teaching Fellow	July,2014	Applied Sciences	100	0	0
Sri.R.D.Pandey	M.Tech	Contractual Faculty	July,2015	Electronics & Comm. Engg.	100	0	0
Ms. Ritambara Mishra	M. Tech	Research cum Teaching Fellow	Jan, 2014	Electronics & Comm. Engg.	100	0	0
Mr. Chandan	M. Tech	Research cum Teaching Fellow	July, 2013	Electronics & Comm. Engg.	20	80	0
Ms. PoojaLohia	M. Tech	Research cum Teaching Fellow	July, 2013	Electronics & Comm. Engg.	20	80	0
Mr. Prabodh Kumar	M. Tech	Contractual Faculty	July, 2015	Electronics & Comm. Engg.	61	39	0
Ms. Savita Singh	B. Tech	Contractual Faculty	July, 2015	Electronics & Comm. Engg.	18	82	0
Ms. Srishti Singh	M. Tech	Contractual Faculty	July, 2015	Electronics & Comm. Engg.	18	82	0
Dr. P.K. Singh	Ph.D.	Associate Professor	01/04/1989	Computer Science &Engg.	16	52	32
Dr. S.P. Singh	Ph.D.	Associate	16/04/1994	Computer	11	28	61

		Professor		Science &Engg.			
Mr. M. Hassan	M.Tech	Assistant Professor	28/05/2003	Computer Science &Engg	15	30	55
Mr. Yashpal	M.Tech	Research cum Teaching Fellow	January, 2014	Computer Science &Engg	81	0	19
Mr. Anajey Mani Tripathi	M.Tech	Research cum Teaching Fellow	January, 2014	Computer Science &Engg	81	19	0
Ms. Sachi Mall	M.Tech	Research cum Teaching Fellow	August, 2013	Computer Science &Engg	100	0	0
Mr.A.K.Patel	M.Tech	Contractual Faculty	July,2015	Computer Science &Engg.	38	51	11
Mr. R.B.Prasad	M.Tech	Assistant Professor	02/02/2015	Mechanical Engg.	39	22	39
Mr. L.B. Singh	M.Tech	Contractual Faculty	July,2015	Mechanical Engg.	19	43	38
Dr. Narendra Singh	Ph.D.	Contractual Faculty	July,2015	Mechanical Engg.	22	34	44
Mr. AmritShivani	M.Tech	Contractual Faculty	July,2015	Mechanical Engg.	42	58	0
Mr. Pawan Kumar Yadav	M.Tech	Contractual Faculty	July,2015	Mechanical Engg.	32	68	0
Ms. DivyaTripathi	B.Tech	Contractual Faculty	July,2015	Mechanical Engg.	19	81	0
MrSavitesh Kumar Sharma	B.Tech	Contractual Faculty	July,2015	Mechanical Engg.	22	78	0
Ms. Shivani Pandey	B.Tech	Contractual Faculty	July,2015	Mechanical Engg.	52	48	0
Mr Hasan Nadeem	B.Tech	Contractual Faculty	July,2015	Mechanical Engg.	18	82	0
Mr. Rajneesh Kumar Singh	M.Tech	Research cum Teaching Fellow	July,2014	Mechanical Engg.	36	46	18
Ms. Anupama Yadav	M.Tech	Research cum Teaching Fellow	July,2014	Mechanical Engg.	40	60	0
Mr. Durga Prasad	M.Tech	Research cum Teaching Fellow	July, 2014	Mechanical Engg.	40	50	10

Dr. S.K.Srivastava	Ph.D.	Associate Professor	23/01/1988	Electrical Engineering	14	86	0
Dr. A.K. Pandey	Ph.D.	Associate Professor	15/09/1989	Electrical Engineering	14	29	57
Mr. K.B. Sahay	M.Tech	Assistant Professor	16/1/2015	Electrical Engineering	28	72	0
Mr. Awadhesh Kumar	M.E.	Assistant Professor	29/12/2014	Electrical Engineering	28	61	11
Dr. Navdeep Singh	Ph .D.	Assistant Professor	31/8/2015	Electrical Engineering	22	78	0
Miss. Amrita Singh	M.Tech	Contractual Faculty	5/2/2014	Electrical Engineering	38	62	0
Mr. Vivek Patel	M.Tech	Contractual Faculty	13/7/2015	Electrical Engineering	04	96	0
Mr. Yugesh Kumar Pandey	M.Tech	Contractual Faculty	13/7/2015	Electrical Engineering	31	69	0
Mr. Raj Kumar Patel	M.Tech	Research cum Teaching Fellow	June,2013	Electrical Engineering	70	30	0
Ms. Sunayana	M.Tech	Asst. Prof.	26th Dec'14	Civil Engineering	21	58	21
Mrs. Sneha Gupta	M.Tech	Asst. Prof.	1st Sept'15	Civil Engineering	30	60	10
Mr. Kshitij Kumar Yadav	M.Tech	Asst. Prof.	18th Sept'15	Civil Engineering	39	61	0
Mr. Pramendra	B.Tech	Contractual Faculty	15th July'15	Civil Engineering	36	64	0
Mr. Yashwant Gupta	B.Tech	Contractual Faculty	15th July'15	Civil Engineering	57	43	0
Mr. Vijyendra	B.Tech	Contractual Faculty	15th July'15	Civil Engineering	19	81	0
Ms.Shipra	B.Tech	Contractual Faculty	15th July'15	Civil Engineering	18	82	0
Mr.Sher Singh	B.Tech	Contractual Faculty	15th July'15	Civil Engineering	35	65	0
Mr. Rajesh Bharti	B.Tech	Contractual Faculty	15th July'15	Civil Engineering	33	50	17
Ms.AparnaVerma	M.Tech	Research cum Teaching Fellow	15th July'15	Civil Engineering	100	0	0

(Instruction: The institution may list here the faculty members engaged in first year teaching along with other relevant data.)

7.1 Academic Support Units (35)

7.1.1 Assessment of First Year Student Teacher Ratio (FYSTR) (10)
Data for first year courses to calculate the FYSTR:

Year	Number of students(approved intake strength)	Number of faculty members(considering fractional load)	FYSTR	Assessment=(10x15)/ FYSTR (Max. is 10)
CAYm2	330	23.56	14.00	10(10.7)
CAYm1	330	21.84	15.11	9.93
CAY	600	26.7	22.47	6.68
Assessment				8.87

7.1.2 Assessment of Faculty Qualification Teaching First Year Common Courses (15)

Assessment of qualification = $3 \times (5x + 3y + 2z0)/N$, where $x + y + z0 \leq N$ and $z0 \leq Z$

x = Number of faculty members with PhD
y = Number of faculty members with ME/MTech/NET-Qualified/MPhil
z = Number of faculty members with BE/BTech/MSc/MCA/MA
N = Number of faculty members needed for FYSTR of 15

Year	x	y	z	N	Assessment of faculty qualification
CAYm2	12.9	5.81	4.85	23.56	11.67
CAYm1	11.28	5.59	4.97	21.84	11.42
CAY	10.77	9.91	6.02	26.7	10.74
Average assessment of faculty qualification					11.28

7.1.3. Basic science/engineering laboratories (adequacy of space, number of students per batch, quality and availability of measuring instruments, laboratory manuals, list of experiments) (8)

Laboratory description	**Space in m^2, (number of Students)**	**Software used**	**Type of experiments**	**Quality of instruments**	**Laboratory manuals**
BAS-9 Engineering chemistry	247, (32)	NA	Quantitative Volumetric Analysis, Identification of functional groups,	Glassware like Burette, Pipette, Conical Flask, Beaker, Test Tube, pH-meter, Spirit lamp, Glass rod, porcelain plate etc. Besides that Organic and Inorganic chemical compounds are in good condition.	Yes
BAS-20 Professional Communication	120, (30)	Speak english	Audio, video, feature console-1,2 etc.	Good, Language lab pack	Available

BCS-01 Computer Programming	94.25,(30)	Different Languages	Programming	Good, Computers (With CPU'S, mouse, UPS, keyboard etc.)	Available
BCE-10 Engineering Graphics	157, (60)	AutoCAD	Engineering Drawings	Satisfactory drawing facilities	Available
BEE-01 Electrical Machine Lab	600,30	NA	Hardware based	Good	Available
BEE-01/02 Electrical Meas. & Inst. Lab	156,30	NA	Hardware based	Good	Available
BEE-01/02 Circuit Lab	40,30	NA	Hardware based	Good	Available
BME-01 Engineering Mechanics	142.82, (30)	NA	Machines/ Equipment	Satisfactory	Available
BEC-01 Fundamental of Electronics Engineering	85.26, (30)	-	Basic Electronics Engg.	Satisfactory	YES
BEC-10 Electronics Workshop & PCB Lab	81,30	-	Hardware Based	Good	Available
BME-10 Workshop Technology (Different shops mentioned below)					
Carpentry shop	18, (8)	NA	4	Satisfactory	Available
Foundry Shop	132, (8)	NA	5	Satisfactory	Available
Welding Shop	55.85, (8)	NA	6	Satisfactory	Available
Black Smith	177.8, (8)	NA	5	Satisfactory	Available
Sheet Metal Cutting & Fitting	129.36, (8)	NA	4	Satisfactory	Available
Machine Shop	624.01, (8)	NA	4	Satisfactory	Available

(Instruction: The institution needs to mention the details for the basic science/engineering laboratories for the first year courses. The descriptors as listed here are suggestive in nature.)

7.1.4 Language Laboratory (2)

Language laboratory	Space(in m^2), number of students	Software used	Type of experiments	Quality of instruments	Guidance
Professional Communication	120, 32 students per batch	Learn English	Computer assisted language lab.	PC, Teacher & Student Console	Faculty assisted, interactive

(Instruction: The institution may provide the details of the language laboratory. The descriptors as listed here are not exhaustive).

7.2. Teaching – Learning Process(40)

7.2.1. Tutorial classes to address student questions: size of tutorial classes, hours per subject given in the timetable (5)

Provision of tutorial classes in timetable: **YES**

Tutorial sheets provided: **YES**

Tutorial classes taken by faculty / teaching assistants / senior students /Others: **Faculty takes one class per week (for 1 batch) i.e. number of tutorials is subjected to number of batches.**

Number of tutorial classes per subject per week: **one class per week (for 1 batch)**

Number of students per tutorial class: **32**

Number of subjects with tutorials:
1st year: 12
2nd year: 12
3rd year: 11
4th year: 9

(Instruction: Here the institution may report the details of the tutorial classes that are being conducted on various subjects and also state the impact of such tutorial classes).

7.2.2 Mentoring system to help at individual levels (5)

Type of mentoring: Professional guidance / career advancement / course work specific / laboratory specific / total development

Number of faculty mentors: **12**
Number of students per mentor: **09**
Frequency of meeting: **04**

(Instruction: Here the institution may report the details of the mentoring system that has been developed for the students for various purposes and also state the efficacy of such system).

7.2.3 Feedback analysis and reward / corrective measures taken, if any (5)

Feedback collected for all courses: **YES**

Specify the feedback collection process: **Online, with the help of University Management System**
Percentage of students participating: **75% to 100 %**

Specify the feedback analysis process:

University has the policy for online feedback system through its web portal in which students are asked to give their confidential feedbacks for theory and practical subjects

taught to them, twice in a semester. The questionnaire used for getting the quantifiable feedback for the subjects taught to them is captured against various attributes as given below.

Note: Rate the following Questions on the Scale of 1 (minimum) to 5 (maximum)

Table 1 for theory

Qn. No.	Question
1.	Whether the lectures were well prepared, organized and course material is well structured?
2.	Was the Blackboard writing clear and organized?
3.	Were any Audio-Visual Aids used?
4.	Were the lecturers delivered with emphasizing on fundamental concepts and with illustrative examples?
5.	Whether difficult topics were taught with adequate attention and ease?
6.	Did the Faculty provide you new knowledge and has command over the subject?
7.	Was the teacher enthusiastic about teaching?
8.	Was the teacher able to deliver the lecture with good communication skills?
9.	Were you encouraged to ask question, to make lectures interactive and lively?
10.	Did the course improve your understanding of concepts, principals in this field and motivated you to think and learn?
11.	Whether the teacher was effective in preparing students for exams?
12.	Were the assignments and tests challenging? (with new & novel problem solving approach)
13.	Was the evaluation fair and impartialand did it help you to improve?
14.	Did teacher give additional technical/non-technical inputs by referring to INTERNET/Additional Books?
15.	Whether teacher was always accessible to the students for counseling, guidance and solving queries off the classroom hours?

Table 2 for practical

Qn. No.	Question
1	Was the selection of Experiment commensurate with theory?
2(a)	Was the experiment leading towards proper consultation/interpretations?
2(b)	Whether teacher helped you in understanding the experimental observation/outcome and explaining the difficulties raised while performing the experiment?
2(c)	Whether the experiment could trigger you for any creative idea?
2(d)	Whether experimental set up was well maintained, fully operational & adequate?
3(a)	Whether precise, updated & self-explanatory lab manuals were provided?
3(b)	Whether submission of experimental write-up was routine & repetitive?
3(c)	Whether teacher does assessment of experimental regularly and gives feedback?
4	Whether the entire lab session was useful in clarifying your knowledge of the theory?
5	Whether you are confident with the use of the concepts, instruments and their application in further studies?

As a part of the Academic Audit of teaching learning process, the evaluation system is given significant weightage and there exists a feedback system for assessing the quality of evaluation tools i.e. question papers for minor and major tests. The questionnaire used for this purpose is given below

Table 3 for Question Paper Quality

Note: Rate the following Questions on the Scale of 1 (minimum) to 5 (maximum)

Qn. No.	Question
1.	Does the question paper test the important learning outcomes?
2.	Does the question paper test the levels of understanding the knowledge, application and skills?
3.	Does the question paper cover the same area of content within the prescribed syllabus?
4.	Does the question paper indicate the limit and scope of the answer in accordance with the allocated marks and allocated time?
5.	Does the question paper describe the instructions clearly?
6.	Is question paper framed in a clear and precise language?
7.	Is the question paper written by keeping in mind the level of programme of study?
8.	Is the question paper able to differentiate the quality of students?
9.	Is the question paper creative and original?
10.	Does the question paper cover all the Units proportionately?
11.	How do you rate the print quality of test/examination papers?
12.	How do you rate the distribution of questions such as short answer type questions, medium answer type questions and long answer type questions?
13.	Does the question paper have reasonable weightage on problem solving ability?
14.	How do you rate the coverage of content beyond syllabus which was taught in class, in the question papers?
15.	Please rate overall quality of the question papers?

The feedback thus collected online is compiled and statistically analyzed by a central committee at University Level. The feedback analysis is deliberated in IQAC and the corrective measures are decided accordingly. The positive and negative aspects of the feedback are communicated to the respective Head of Departments for onward communication to concerned faculty members. As a token of appreciation for positive feedback the University is in the process of making the provisions to recognize such good teachers. The faculty members having some weaknesses in their feedback are communicated the same for the sake of overall improvement of the teaching and evaluation processes.

Basis of reward / corrective measures, if any:

The University is in the process of making the provisions to recognize good teachers on the basis of student feedback.
The faculty members having some weaknesses in their feedback are communicated the same for the sake of overall improvement of the teaching and evaluation processes.

Number of corrective actions taken in the last three years: **Based on the student feedback Head of Department has been communicated to take the necessary corrective action as and when it was required.**

(Instruction: The institution needs to design an effective feedback questionnaire. It needs to justify that the feedback mechanism it has developed really helps in evaluating teaching and finally contributing to the quality of teaching).

7.2.4 Scope for self-learning (5)

(Instruction: The institution needs to specify the scope for self-learning / learning beyond syllabus and creation of facilities for self-learning / learning beyond syllabus.)

- The University has access to various e-books, journals and magazines which are available in the University's Library to help students to explore and read about their areas of interest.
- This also inculcates a habit of reading and thinking on multi-disciplinary terms.
- In addition there is an access of high speed Internet in each hostel which helps them to be tech savvy and moreover a free thinker.
- This helps student to come up with new ideas and new techniques.
- Seminars are conducted periodically to keep students aware of the recent discoveries and findings. This also adds to the learning in domains which are beyond the scope of syllabus at undergraduate level.
- Faculty from time to time change adopt new ways in the course to enhance self-learning such as:
    i. Home Assignment
    ii. Case Studies
    iii. Open Book Test
    iv. Term Paper
    v. Critical Review of recent topics

7.2.5 Generation of self-learning facilities, and availability of materials for learning beyond syllabus (5)

(Instruction: The institution needs to specify the facilities for self-learning / learning beyond syllabus.)

- The University has got IP based licenses for e-books and journals which are accessible round the clock throughout the campus via High Speed LAN.
- NPTEL videos and lectures have been stored over a dedicated server which is again accessible through high speed LAN within the entire campus.

7.2.6. Career Guidance, Training, Placement, and Entrepreneurship Cell (5)

(Instruction: The institution may specify the facility and management to facilitate career guidance including counseling for higher studies, industry interaction for training/internship/placement, Entrepreneurship cell and incubation facility and impact of such systems)

The Cell organizes the training and campus recruitment programs for the students of all disciplines. Practical training for the students is arranged by the cell in consultation with and on the basis of availability of seats in different Industries/ Organizations/Firms/Training Centers to make the students to have practical knowledge and to provide them to know the applications of scientific principles. Industrial training is essential for students as per University norms.To facilitate all these activities committees at the University as well as at department level are constituted.

<u>At University Level</u>

- Training and Placement cell,
- Research and Consulting Management Committee,
- Industry-Institute-Interaction Cell,
- Academia Industry Cell

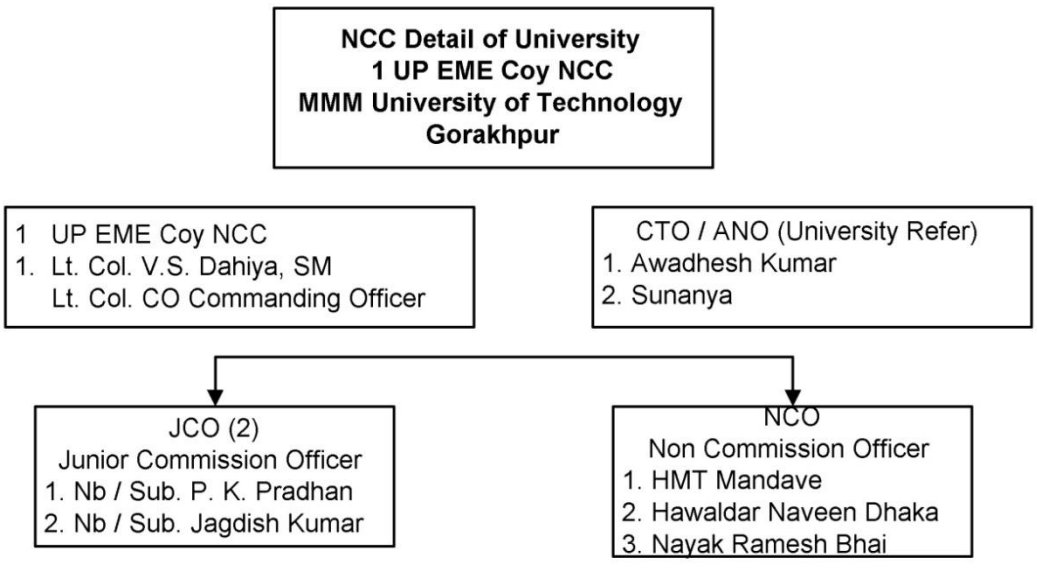
At Department Level

- Carrier Guidance Committee
- Training & Placement Committee
- Industrial Tour Committee
- SeminarCommittee
- Departmental Entrepreneurship Committee
- Departmental Advisory Committee
- Innovation Cell

7.2.7. Co-curricular and Extra-curricular Activities (5)

(Instruction: The institution may specify the Co-curricular and extra-curricular activities, e.g., NCC/NSS, cultural activities, etc)

- Every year the university organizes a three day annual sports and two day annual cultural program. Every year an inter branch games and other activities are also organized throughout the session. The university organizes inter university tournaments for cricket & other games.
- The students' activity centre motivates and promotes the student to take part in activities like debate, essay writing, quiz competition, literary, participation in seminars and workshops.
- The NSS/NCC training is compulsory and all the students admitted in the university are required to enroll themselves into one of the services at the time of joining in the university. The training scheme is of two years duration. Details of NCC existing in University:



Civil Staff

1. Senior Asst. Clerk / Training Clerk - Rajendra Kumar
2. Account Clerk (Finance) – B.B. Tiwari
3. Junior Clerk
4. Store Works (Lascar) 1. Ahmad 2. Nisar

5. Chaukidaar – Langar Dubey
6. Peon – RamashankarMaurya
7. Safaiwala-
8. Driver- 1. Ram Kripal 2. Bhim Singh

Office Details

1. Clothing Store
2. Training Store
3. Security Guard Room
4. CO Office (University Administrative Block)
5. Main Office (University Administrative Block)

Vehicle Details

1. Swaraj Mazda – 1
2. Maruti Gipsy – 1
3. Motor Cycle – CD Delux- 1

Artillery Details

Small Arms/ Ammunition

1. 25 Pounder Guns

Students Enrolled

Seats Allotted by NCC Directorate Lucknow- 200

2. First Year- 81
3. Second Year- 66
4. Third Year- 53

Boys- 67%

Girls- 33%

7.2.8. Games and Sports, facilities, and qualified sports instructors (5)

(Instruction: The institution may specify the facilities available and their usage in brief)

The following sports facilities are available-

- **Indoor Sports**: Table Tennis (Playing facility in each hostel), Badminton Court (in each hostel), Carom, Chess (Equipments and playing accessories available in common rooms of each hostel) etc.
- **Outdoor Sports**: Hockey, Football, Cricket, Volley Ball, Basket Ball, Lawn Tennis
- **Gymnasium**: Equipped with modern facilities for both Girls & Boys (6 Stations in Boys Gym & 3 Stations in Girls Gym)
- **Sketing Court:** A newly built sketing court is there for boy and girls.
- **Physical Training Instructor (PTI): Qualification: M.P.Ed.** PTI is there to look after all kinds of sports and games facilities.
- **Sports mate** = 02 persons out of them one has B.P.Ed degree
- **YogaTrainers, Coaches** for other different kinds of Games & sports are regularly being invited on contract basis.
- **University teams** are sent to participate at national and state level tournaments.

VIII. Governance, Institutional Support and Financial Resources (75)

8.1 Campus Infrastructure and Facility (10)

Madan Mohan Malaviya University of Technology, Gorakhpur, erstwhile Madan Mohan Malaviya Engineering College, Gorakhpur established in 1962, was reconstituted as non-affiliating technological University by U.P. Act Number 22 of 2013 of U.P. Government on December 1, 2013. It is situated on the State Highway-Gorakhpur-Deoria Road, about 9 Kms. from Railway Station and Bus Station, at a latitude 26° 45′ and Height 102 m above the Mean Sea Level. It has 338.52 acres' a lush green residential campus.

Following Facilities are: Boy's & Girl's Hostels, Dispensary, Branch of S.B.I., ATMs, Post Office, A.C. Canteen, State Govt. Co-operative Canteen, N.C.C., N.S.S., Library, Internet, Guest House, Common Rooms Separately for Hostellers & Day Scholars, ITRC, Games & Sports Hard Courts for Basket Ball, Volley Ball, Lawn Tennis, Badminton (Indoor and Outdoor), Table Tennis in every hostel, Fields for Football, Hockey, Cricket, Sports Track, Facilities for Throws and jumps, Gymnasium.

8.1.1. Maintenance of academic infrastructure and facilities (4)

- The maintenance of academic infrastructure and facilities are being provided by university's maintenance department like civil construction & electrical repairing &maintenance. Also, through outsourcing person cleaning & sweeping.

(Instruction: Specify distinct features)

8.1.2. Hostel (boys and girls), transportation facility, and canteen (2)

Hostel*	No. of Room	No. of Students Accommodated
Hostel for Boys-05	676	1418
Hostel for Girls-03	164	489

*In addition to above, 02 boys' hostel of capacity 360 (120+240) and one girls' hostel of capacity 75 are under construction.

(Instruction: Specify the details of installed capacity, quality, availability, etc.)

8.1.3. Electricity, power backup, telecom facility, drinking water, and security (4)

(Instruction: Specify the details of installed capacity, quality, availability, etc.)

Electricity & power backup (100% power backup to academic area, hostels and amenities)

- Electricity Supply-7x24 hours roster free by UPPCL
- Tube Wells-04 Nos.
- Over Head Tanks-02 Nos.
- Electricity Substation inside Campus of11KV/440V
- Generator-01 No. of 250 KVA
- Generator-01 No. of 150 KVA
- Generator-02 Nos. of 63 KVA

- Generators-02 Nos. of 10 KVA in different departments.
- Generators-02 Nos. of 5 KVA in different departments

Telecom facility

- CUG Mobile Phones to all the faculty members, Officer-in-Charges & other important functionaries.
- WLL phone facility in all Offices, Departments, Hostels, Dispensary, Workshops etc.

Drinking water

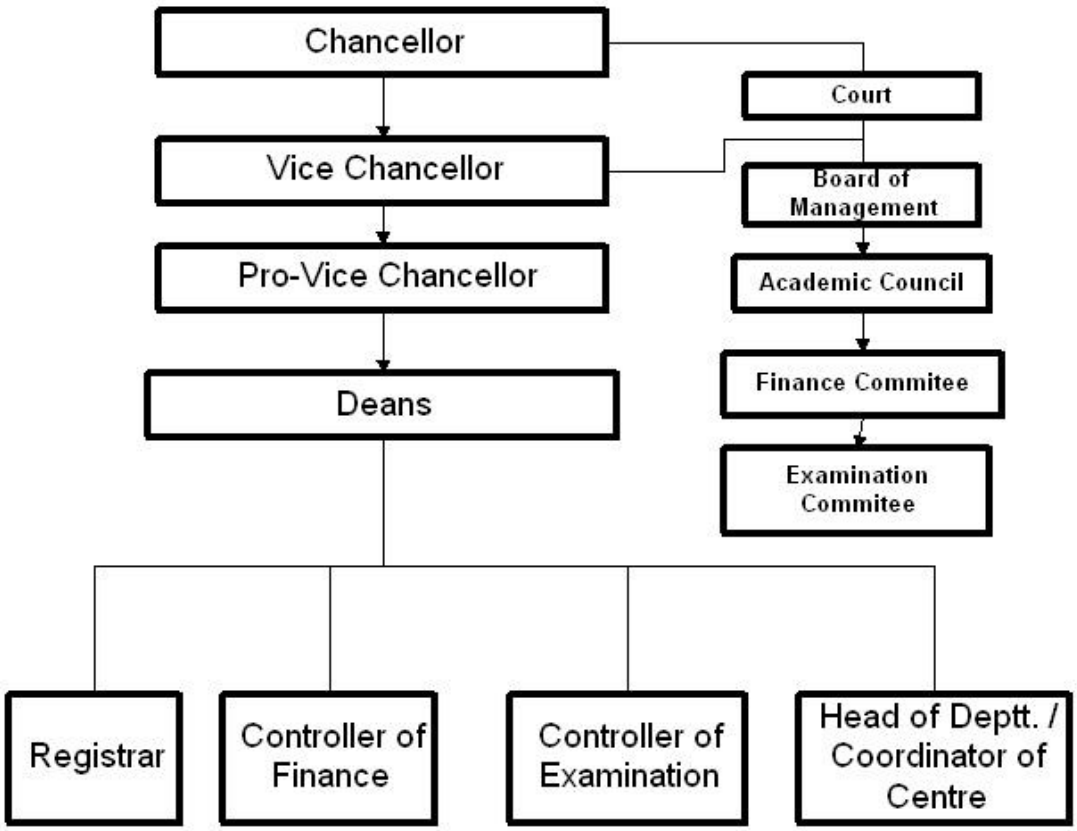
- Every Departments& Hostels are having water cooler equipped with water purification facility.

Security

- Round-the-clock a tight security arrangement inside the campus.
- Proctor, 05 Deputy Proctors and officer in charge security from the University have been deputed.
- An anti-ragging squad is continuously looking after the newly admitted students in order to make the university ragging-free.
- All critical locations are under CCTV surveillance.

8.2. Organization, Governance, and Transparency (10)

8.2.1 Governing body, administrative setup, and functions of various bodies (2)



Organisational Structure of MMMUT, Gorakhpur

THE COURT

13. Sri Ram Naik, Chancellor & Honourable Governor of U.P.
14. Prof. Onkar Singh, Vice Chancellor
15. Prof. R. Yadav, Ex- Director, NIT Jamshedpur
16. Prof. S. K. Balsubramaniyan, IIT (BHU), Varanasi
17. Prof, B. Chandrashekhar, IIT Kanpur
18. Prof. R. R. Mishra, BITS, Pilani
19. Prof. Devi Singh, Ex- Director, IIM, Lucknow
20. Principal Secretary, Finance Department, U.P. Govt.
21. Principal Secretary, Higher Education Department, U.P. Govt.
22. Principal Secretary, Technical Education Department, U.P. Govt.
23. UGC Nominee
24. Sri C. Kandasamy, Director General (Road Development) & Special Secretary, Ministry of Road Transport & Highway, New Delhi - AICTE Nominee

BOARD OF MANAGEMENT

Chairman

Prof. Onkar Singh
Vice-Chancellor
Madan Mohan Malaviya University of Technology, Gorakhpur

Members (Uttar Pradesh Government Nominees)

- **Prof. Shyam Lal**
  Mathematics Department, BHU, Varanasi
- **Prof. Naveen Kumar**
  Head, Mechanical Engineering Department, D.T.U, Delhi
- **Prof. N K Sharma**
  I.I.T., Kanpur
- **Sri S. K. Agrawal**
  Managing Director, S. K. Chemicals Pvt. Ltd. Gorakhpur
- **Two Professors of the University**
- **Two Deans of the University**

Members (Ex-Officio)

- **Principal Secretary/Secretary, Finance Department**
- **Principal Secretary/Secretary, Higher Education Department**
- **Principal Secretary/Secretary, Technical Education Department**

Secretary (Ex-Officio)

- **Sri K. P. Singh,**
  Registrar
  Madan Mohan Malaviya University of Technology, Gorakhpur

ACADEMIC COUNCIL

Chairman

Prof. Onkar Singh
Vice-Chancellor
Madan Mohan Malaviya University of Technology, Gorakhpur

Members

- **Prof. Sanjay Mittal**
  Aerospace Department, I. I.T., Kanpur

- **Sri Rajendra Kumar Jalan**
  Chairman, Council for LEather Export India, Kanpur
- **Prof. Dharmendra Singh Sengar**
  I.I.M., Lucknow
- **Prof. H Devraj**
  Vice Chairman, University Grants Commission,
  Bahadur Shah Zafar Marg, New Delhi
- **Prof. Animesh Das**
  Professor, Department of Civil Engineering, I. I.T., Kanpur
- **Sri Mohd. Azam Khan**
  Managing Director/President, Industrial Association
  M/S A. R. P. Industries, GIDA, Gorakhpur
- **All Deans of the University**
- **Prof. Udai Shanker**
  Professor, Computer Sc. & Engineering Department
- **Prof. B. S. Rai**
  Professor, Electronics and Communication Engineering Department
- **Prof. K. G. Upadhyay**
  Professor, Electrical Engineering Department
- **All Head of Schools / Departments**
- **Examination Controller**
- **Dr. Arjun Dubey**
  Associate Professor, Applied Science Department
- **Sri R. N. Mall**
  Assistant Professor, Mechanical Engineering Department
  Other such members as prescribed by the University Act
- **Secretary (Ex-Officio)**
- **Sri K. P. Singh**
  Registrar
  Madan Mohan Malaviya University of Technology, Gorakhpur

FINANCE COMMITTEE

Chairman

Prof. Onkar Singh
Vice-Chancellor
Madan Mohan Malaviya University of Technology, Gorakhpur

Members (Ex-Officio)

- Principal Secretary / Secretary
  Department of Finance, Govt. of Uttar Pradesh
- Principal Secretary / Secretary
  Department of Technical Education, Government of Uttar Pradesh

Members (BOM Nominees)

- Prof. Naveen Kumar
  Delhi Technical University, Delhi
- Prof. N. K. Sharma
  I.I.T., Kanpur
- Members (Ex-Officio)

Registrar
Madan Mohan Malaviya University of Technology, Gorakhpur

Secretary(Ex-Officio)

- Controller of Finance
- Such Other Members as may be prescribed by the Statues

EXAMINATION COMMITTEE

Chairman

Prof. Onkar Singh
Vice-Chancellor
Madan Mohan Malaviya University of Technology, Gorakhpur

Members

- Dr. V. K. Giri
  Professor, Electrical Engineering Department
- Dr. S. K. Srivastava
  Professor, Mechanical Engineering Department
- Dr. V. K. Singh
  Ex- Pro- Vice-Chancellor, U.P. Technical University, Lucknow, Professor, Mathematics Department, I.E.T., Lucknow
- Dr. A. K. Saxena
  Professor, Department of Electrical Engineering, Dayal Bag Educational Institute, Dayal Bag, Agra
- All Deans of the University
- Secretary (Ex-Officio)
  Controller of Examination

ADMINISTRATIVE COMMITTEE

Chairman

Pro Vice Chancellor or Dean, Faculty Affairs in his absence

Members

- Dean, Student Affairs
- Dean, Planning, Resource Generation and Alumni Relations
- Dean, Post Graduate Studies and Research & Development
- Dean, Under Graduate Studies and Entrepreneurship
- Registrar
- Controller of Finance

PURCHASE COMMITTEE

Committee for the purchase of the items costing more than one lac:

Convener

Controller of Finance

Members

- Registrar
- Respective HOD/ Sectional Officer/Principal Investigator of research Projects (Only for

Research Projects)

- Two Members nominated by Hon'ble Vice Chancellor as per nature of the items to be purchased.

Committee for the purchase of the items costing less than one lac:

Chairman

Respective HOD/ Sectional Officer

Members

- One Faculty Member nominated by Head of Department/Sectional Officer
- Principal Investigator of Research Projects (Only for Research Projects)
- One External faculty member nominated by Hon'ble VC

ACADEMIC AFFAIRS COMMITTEE

Chairman

Pro Vice Chancellor or Dean, Faculty Affairs in his absence

Members

- Dean, Student Affairs
- Dean, Planning, Resource Generation and Alumni Relations
- Dean, Post Graduate Studies and Research & Development
- Dean, Under Graduate Studies and Entrepreneurship
- All Head of Departments
- Examination Controller
- Registrar

REGISTRAR

Teaching Supporting Technical Staff

- System Manager
- Computer Programmers
- Computer Operators
- Workshop Superintendent
- Foreman
- SLT/JLT
- Mechanic Grade-A & Grade-B
- Horticultural Assistant
- Draftsman
- Such other technical staff as decided by the Board/Govt.

Administrative (Non-Teaching Staff)

- Medical Officers
- Engineers (Assistant/Junior)
- Stores officer
- Librarian
- Deputy Librarian
- Assistant Librarian
- S N D (Senior Noter and Drafter)
- Routine Grade Clerk (RGC)
- Such other staff as decided by the Board/Govt.

CONTROLLER OF FINANCE

- Account Officer
- Internal Auditor
- Cashier
- Bill Clerk

CONTROLLER OF EXAMINATION

- Additional Controller of Examination
- Assistant Controller of Examination
- Centre Superintendent
- Assistant Centre Superintendents

HEAD OF DEPARTMENT

For smooth functioning of Civil Engineering Department, various committees are constituted

Departmental Advisory Group

Chairman:	Dr. R.K.Srivastava,UP BC,LKO
Member:	Dr. R.P.Dubey,WAPCOS,Gurgaon,Haryana
Member:	Er. P.N.Tiwari,UNITECH, Haryana
Member:	Sri Shasi Bhushan,Vikas Build Tech Ltd. GKP
Member:	Er. Ramesh Kr. Gupta,Isoluxcorsan India,Haryana
Member:	Er. Naveen Pratap Singh,Developers Bhikajicama Place, New Delhi
Member:	Dr. S.M.Ali Jawaid, Professor
Member:	Dr. ShriRam, Associate Professor
Member:	Dr. R.K.Shukla Associate Professor

Departmental Under-Graduate Studies Committee

Chairman:	Dr. S.M.Ali Jawaid, Professor
Convener:	Mrs. Sana Zafar, Assistant Professor
Member :	Mr. S.N. Choudhary, Associate Professor
Member:	Mr. Ram Dular, Associate Professor
Member:	Dr. ShriRam, Associate Professor

Departmental Exams Committee

Chairman:	Dr. S.M.Ali Jawaid, Professor
Member :	Mr. S.N. Choudhary, Associate Professor
Member:	Mr. Kshitij Yadav, Assistant Professor

Departmental Time Table Committee

Chairman:	Dr. S.M.Ali Jawaid, Professor
Member :	Ms Sunayana, Assistant Professor
Member:	Mrs. Sana Zafar, Assistant Professor

Departmental General Maintenance Committee

Chairman:	Dr. S.M.Ali Jawaid, Professor
Member :	Mr. Kshitij Yadav, Assistant Professor
Member:	Mr. Vinay Kr Singh, Assistant Professor
Member:	Mrs. Sneha Gupta, Assistant Professor
Member:	Mr. Ashutosh Kr. Singh
Member:	Class Senior II yr
Member:	Class Senior III yr
Member:	Class Senior IV yr

Departmental Library Committee

Chairman:	Dr. S.M.Ali Jawaid, Professor
Member :	Mr. S.N. Choudhary, Associate Professor
Member:	Dr. ShriRam, Associate Professor
Member:	Ms. Sunayana, Assistant Professor

Departmental Project Monitoring Committee

Chairman:	Dr. S.M.Ali Jawaid, Professor
Member:	Dr. ShriRam, Associate Professor
Member:	Dr. Govind Pandey, Associate Professor
Member:	Mrs. Sneha Gupta, Assistant Professor

Departmental Seminar Monitoring Committee

Chairman:	Dr. S.M.Ali Jawaid, Professor
Member:	Dr. A.K.Mishra, Assistant Professor
Member:	Mrs. Sneha Gupta, Assistant Professor

Departmental Industrial Training Monitoring Committee

Chairman:	Dr. S.M.Ali Jawaid, Professor
Member:	Dr. A.K.Mishra, Assistant Professor
Member:	Mr. Vinay Kr Singh, Assistant Professor

Departmental Industrial Tour Committee

Chairman:	Dr. S.M.Ali Jawaid, Professor
Member:	Mr. Ram Dular, Associate Professor
Member:	Mr. Vinay Kr Singh, Assistant Professor
Member:	Mr. Kshitij Yadav, Assistant Professor

Departmental Website Management Committee

Chairman:	Dr. S.M.Ali Jawaid, Professor
Member:	Dr. A.K.Mishra, Assistant Professor
Member:	Mrs. Sneha Gupta, Assistant Professor

Departmental Alumni Committee

Chairman:	Dr. S.M.Ali Jawaid, Professor
Member:	Mr. Ram Dular, Associate Professor
Member:	Dr. ShriRam, Associate Professor
Member:	Dr. Govind Pandey, Associate Professor

Departmental Level Grievances Redressal Committee (GRC)

Chairman:	Mr. Ram Dular, Associate Professor
Member Secretary:	Mr. S.N. Choudhary, Associate Professor
Member:	Mrs. Sana Zafar, Assistant Professor
Member:	Ms. Sheena Garg, Student IV yr. CE
Member:	Mr. Rajeev Srivastava, Draftsman

Departmental Career Guidance Cell

Chairman:	Dr. S.M.Ali Jawaid, Professor
Member:	Dr. R.K.Shukla Associate Professor
Member:	Dr. A.K.Mishra, Assistant Professor
Member:	Mrs. Sana Zafar, Assistant Professor

Departmental Training & Placement Cell

Chairman:	Dr. S.M.Ali Jawaid, Professor
Member:	Dr. A.K.Mishra, Assistant Professor
Member:	Ms. Sunayana, Assistant Professor
Member:	Mr. Vinay Kr Singh, Assistant Professor
Member:	Class Senior III yr
Member:	Class Senior IV yr

Departmental Entrepreneurship Cell

Chairman:	Dr. S.M.Ali Jawaid, Professor
Member:	Mr. Ram Dular, Associate Professor
Member:	Mr. Vinay Kr Singh, Assistant Professor
Member:	Mr. Kshitij Yadav, Assistant Professor

Departmental Association of Civil Engineers (ACE)

Chairman:	Dr. S.M.Ali Jawaid, Professor
Member:	Dr. ShriRam, Associate Professor
Member:	Abhinav Verma
Member:	Swapnil Tiwari
Member:	Mohit Kumar Singh
Member:	Rishabh Tiwari

Departmental Innovation Cell

Chairman:	Dr. S.M.Ali Jawaid, Professor
Member:	Ms. Sunayana, Assistant Professor
Member:`	Mrs. Sneha Gupta, Assistant Professor
Member:	Mr. Kshitij Yadav, Assistant Professor
Member:	Class Senior II yr
Member:	Class Senior III yr
Member:	Class Senior IV yr

Departmental Laboratory Management Committee

Chairman:	Dr. S.M.Ali Jawaid, Professor
Member:	Mr. Ram Dular, Associate Professor
Member:	Dr. Govind Pandey, Associate Professor
Member:	Dr. ShriRam, Associate Professor
Member:	Dr. R.K.Shukla Associate Professor
Member:	Dr. A.K.Mishra, Assistant Professor

Member: Mrs. Sana Zafar, Assistant Professor

Departmental Special Lectures Management Committee

Chairman: Dr. S.M.Ali Jawaid, Professor
Member: Dr. A.K.Mishra, Assistant Professor
Member: Ms. Sunayana, Assistant Professor
Member: Mrs. Sana Zafar, Assistant Professor
Member: Mr. Kshitij Yadav, Assistant Professor

DIFFERENT CELLS/COMMITTEES

For the smooth functioning of the University, there exist following Cells/Committees.

CAMPUS DEVELOPMENT CELL

Chairman

Prof. V. K. Giri
Professor, EED

- Member Dr. R. K. Lal, Assistant Professor, MED
- Member Sri Manoj Baloni, Audit Assistant
- Member Sri Ram Bahal Yadav, R.G.C.
- Member Sri Ravi Mohan Srivastava, R.G.C.
- Member Secretary Sri D. S. Singh, Assistant Professor, CSED

COMMUNITY DEVELOPMENT CELL

Chairman

Dr. Sudhir Kumar Srivastava
Associate Professor, EED

- Member Sri M. K. Srivastava, Assistant Professor, CSED
- Member Sri Ram Bilas Prasad, Assistant Professor, MED
- Member Ms Sana Zafar, Assistant Professor, CED
- Member Ms. Sneha Gupta, Assistant Professor, CED
- Member Secretary Dr. Sudhanshu Verma, Assistant Professor, ECED

UNIVERSITY SPACE ADVISORY COMMITTEE

Chairman

Dean, Planning

- Member Dean, Academics
- Member Dean, Student Affairs
- Members Dean, Research and Development
- Members Finance Controller
- Convener Head, Civil Engineering Department

ENVIRONMENTAL ADVISORY COMMITTEE

Chairman

Dean, Planning

- Member Dean, Academics
- Member Dean, Student Affairs

- Member Dean, Research and Development
- Member Registrar
- Convener Dr. Govind Pandey, Associate Professor, CED

GRIEVANCES REDRESSAL COMMITTEE (GRC)

Chairman

Dean, Student Affairs

- Member Dean, Under Graduate Studies and Entrepreneurship
- Member Dean, Planning, Resource Generation and Alumni Relations
- Member Dean, Post Graduate Studies and Research & Development
- Member Registrar
- Member Controller of Finance

Member Secretary Proctor

ELECTRONIC DATA PROCESSING CELL (EDP)

Chairman

Dr. S. P. Singh
Associate Professor, CSED

- Member Sri M. K. Srivastava, Assistant Professor, CSED
- Member Ms. Sana Zafer, Assistant Professor, CED
- Member Sri K. B. Sahay Assistant Professor, EED
- Member Sri. G. D. Bharti, Assistant Professor, ECED
- Member Dr. A. K. Mishra, Assistant Professor, CED
- Member Sri R. B. Prasad, Assistant Professor, MED
- Member Dr. Harish Chandra, Assistant Professor, ASD

INTERNAL QUALITY ASSURANCE CELL (IQAC)

Chairman

Prof. Onkar Singh
Vice-Chancellor, MMMUT, Gorakhpur

- Member Prof. S. M. Ali Jawaid, Professor, CED
- Member Prof. B. S. Rai, Professor, ECED
- Member Prof. K. G. Upadhyay, Professor, EED
- Member Prof. D. K. Dwivedi, Associate Professor, ASD
- Member Prof. V. K. Giri, Professor, EED
- Member Dr. Sri Ram, Associate Professor, CED
- Member Dr. A. K. Sharma, Associate Professor, CSED
- Member Dr. U. C. Jaiswal, Associate Professor, CSED
- Member Dr. S. K. Srivastava, Professor, MED
- Member Dr. Gopinath, Professor, M.B.A., DDU, Gorakhpur University
- Member Er. S. K. Agrawal, MD, S.K. Chemicals, Gorakhpur
- Member Er. R. N. Singh, Secretary, Chamber of Industries, Gorakhpur
- Member Prof. Udai Shanker, Professor &Head, CSED

Secretary

STUDENT COUNSELING CELL

Chairman

Prof. K.G. Upadhyay
Professor, EED

- Member Major G. S. Tripathi, Associate Professor, ECED
- Member Dr. S. P. Singh, Associate Professor, CSED
- Member Ms. Sunayana, Assistant Professor, CED
- Member Ms Swati Gangwar, Assistant Professor, MED
- Member Sri Gagandeep Bharti, Assistant Professor , ECED
- Member Secretary Dr. Amit Kumar Barnwal, Assistant Professor, ASD

UNIVERSITY WOMEN GRIEVANCE REDRESSAL CELL

Chairman

Smt. Meenu
Assistant Professor, CSED

- Member Ms Swati Gangwar, Assistant Professor, MED
- Member Smt. Indra Srivastava, R.G.C.
- Member Smt. Shadma Mirza, R.G.C.
- Member Ms. Kanchan Singh, Attendant

ADMISSION CELL

Coordinator

Prof. S.K. Srivastava
Professor, MED

Deputy Coordinator

- Dr. U. C. Jaiswal, Associate Professor, CSED

Assistant Coordinator

- Sri Awadhesh Kumar, Assistant Professor, EED
- Sri R.B. Prasad, Assistant Professor, MED
- Dr. Amit Barnawal, Assistant Professor, ASD

Members

- Member, Controller of Finance, MMMUT, Gorakhpur
- Member (Ex-officio) Sri K. P. Singh, Registrar, MMMUT, Gorakhpur

RESEARCH AND CONSULTING MANAGEMENT COMMITTEE

Chairman

Prof. K.G. Upadhyay
Professor, EED

- Member Prof. B.S. Rai, Nominated by Management Board
- Member Prof. Udai Shanker, Nominated by Vive Chancellor
- Member Prof. V. K. Giri, EED, Nominated by Vive Chancellor
- Member Finance Controller, MMMUT, Gorakhpur
- Member Secretary Registrar, MMMUT, Gorakhpur

INDUSTRY-INSTITUTE-INTERACTION CELL

Chairman

Prof. Udai Shanker
Professor, CSED

- Member Prof. S. M. Ali Jawed, Professor & HOD, CED
- Member Prof. V. K. Giri, Professor, EED

- Member — Prof. S. K. Srivastava, Professor &HOD, MED
- Member — Sri G. S. Tripathi, HOD, ECED
- Member — Dr. P. K. Singh, Associate Professor, CSED
- Member — Dr. S. P. Singh, Associate Professor,CSED
- Member — Ms. Sunayana, Assistant Professor, CED
- Member — Sri Ram Bilas, Assistant Professor, MED
- Member — Sri K. B. Sahay, Assistant Professor, EED
- Member — Dr. Sudhanshu Verma, Assistant Professor, ECED
- Member — Sri K. L. Chauhan, IGL, GIDA, Gorakhpur
- Member — Sri H. R. Jaiswal, MD, Urja Gasifier, Gorakhpur
- Members — Two- two, students Nominated by HOD of B.Tech./MCA/ MBA
- Member Secretary — Sri Rajan Mishra, Coordinator, T & P

ACADEMIA INDUSTRY CELL

Chairman

Prof. S. K. Srivastava
Professor, MED

- Member — Dr. S. C. Jaiswal, Associate Professor, MED
- Member — Dr. R. K. Chauhan, Associate Professor, ECED
- Member — Dr. Rakesh Kumar, Associate. Prof. CSED
- Member — Dr. D. K. Dwivedi, Associate Professor, ASD
- Member — Dr. A. K. Mishra, Assistant Professor, CED
- Member — One-one students from B. Tech and M. Tech. from all the branches
- Member — Sri K. L. Chauhan, IGL, GIDA, Gorakhpur
- Member — Sri H. R. Jaiswal, MD, Urja Gasifier, Gorakhpur Member:
- Member Secretary — Dr. U. C. Jaiswal, Associate Professor, CSED

UNIVERSITY ADMISSION COMMITTEE

Chairman

Chairman

All Deans of the University, out of which one of the Dean shall be nominated by Hon'ble Vice Chancellor as Chairman of UAC and remaining shall be members

- Member — Representative of SC\ST nominated by Hon'ble VC
- Member — Representative of OBC nominated by Hon'ble VC
- Member — Registrar
- Member — Controller of Finance
- Coordinator — To be nominated by Hon'ble VC

COUNCIL OF STUDENT ACTIVITIES (CSA)

Chairman

Dr. S. M. Ali Jawaid
Professor, CED

- Member — O/Cs of Different Games & Sports (Faculty Members of the University)
- Member — Captains of Different games and Sports (Students of the University)
- Member — O/C Cultural Activities ((Faculty Members of the University)
- Member — Cultural Secretary (Students of the University)

Following table gives the details of the different committee meeting

S.No.	Name of the Committee	Date of meeting	Number of the Persons Attended The Meeting
1.	THE COURT	17.03.2015	06
2.	BARD OF MANAGEMENT (BOM)	14.03.2014	08
		24.06.2014	11
		23.08.2014	14
		20.12.2014	12
		31.01.2015	12
		16.05.2015	11
		26.08.2015	12
3.	ACADEMIC COUNCIL	11.06.2014	12
		10.12.2014	15
		25.04.2015	13
4.	FINANCE COMMITTEE	24.06.2014	06
		20.12.2014	07
		16.05.2015	06
		26.08.2015	05
5.	EXAMINATION COMMITTEE	13.11.2014	11
		06.04.2015	10
6.	INTERNAL QUALITY ASSURANCE CELL	14.08.2015	13
7.	ACADEMICS COMMITTEE	07.04.2014	08
		10.04.2014	08
		15.04.2014	10
		24.04.2014	10
		22.05.2014	07
		01.07.2014	09
		10.07.2014	09
		02.08.2014	11
		06.08.2014	09
		28.08.2014	05
		15.11.2014	09
		20.11.2014	09
		27.11.2014	09
		11.12.2014	09
		03.01.2015	14
		20.01.2015	11
		03.03.2015	04
		13.03.2015	10
		09.04.2015	13
		18.06.2015	10
		01.08.2015	09
		13.08.2015	11
		21.08.2015	07

		01.10.2015	07

Transparency

- University maintains 100% transparency in all its activities and e-processes are extensively used.
- All relevant stake holders are involved in the strategic decision making in the University.
- All the decisions taken by the various authorities/ bodies are regularly uploaded on the university website www.mmmut.ac.in
- The University management system"(UMS) offers access of information to all faculty members, staff and students through university's web portal.
- In order to maintain academic integrity software "Turnitin" is used.

(Instruction: List the governing, senate, and all other academic and administrative bodies; their memberships, functions, and responsibilities; frequency of the meetings; and attendance therein, in a tabular form. A few sample minutes of the meetings and action taken reports should be annexed.)

8.2.2. Defined rules, procedures, recruitment, and promotional policies, etc. (2)

- A well established rules/practices for direct recruitment/promotions are being followed as per the guidelines of UGC/AICTE/State Govt./University.
- University follows the policies of open recruitment of faculty and staff members amongst the Indian Nationals. The Board of Management (BOM) of University has prescribed the detailed rule procedures and recruitment policy as appended as Annexure C.
- The faculty promotions is carried out as per the regulations prescribed by AICTE/UGC/State Govt. and as approved by the BOM of University. The detailed rules/procedures are appended in Annexure D.
- The promotion of staff members/officers of the University is carried out as per the policy prescribed by State Govt. and approved by the BOM of University.
- All the information regarding recruitment/promotions are well notified at national level and uploaded on university website.

(Instruction: List the published rules, policies, and procedures; year of publications; and state the extent of awareness among the employees/students. Also comment on its availability on Internet, etc.)

8.2.3. Decentralization in working including delegation of financial power and grievance redressal system (3)

Grievance Redressal Committee (GRC)

- A GRC at university level headed by DSA has been constituted as per the UGC guidelines and a link is provided at the university web portal
- There is a separate GRC for the Woman.
- A departmental DGRC has also been constituted which is looking after the grievances at department level.

University Level Grievances Redressal Committee (GRC)

Chairman:	Dean, Student Affairs
Member:	Dean, Under Graduate Studies and Entrepreneurship
Member:	Dean, Planning, Resource Generation and Alumni Relations
Member:	Dean, Post Graduate Studties and Reseach & Development
Member:	Registrar
Member:	Controller of Finance
Member Secretary:	Proctor

University Level Woman Grievances Redressal Cell (GRC)

Chairman:	Smt Meenu, Assistant Professor, CSED
Member:	Ms Swati Gangwar, Assistant Professor, MED
Member:	Smt. Indra Srivastava, R.G.C.
Member:	Smt. Shadma Mirza, R.G.C.
Member:	Ms. Kanchan Singh, Attendant

Departmental Level Grievances Redressal Committee (GRC)

Chairman:	Mr. Ram Dular, Associate Professor
Member Secretary:	Mr. S.N. Choudhary, Associate Professor
Member:	Mrs. Sana Zafar, Assistant Professor
Member:	Ms. Sheena Garg, Student IV yr. CE
Member:	Mr. Rajeev Srivastava, Draftsman

(Instruction: List the names of the faculty members who are administrators/decision makers for various responsibilities. Specify the mechanism and composition of grievance redressal system, including faculty association, staff-union, if any.)

8.2.4. Transparency and availability of correct/unambiguous information (3)

- University follows the policy of complete transparency in its processes and all relevant documents inrespect to the different stakeholders are posted on the University web site for the access of all concerned.
- University e governance system (University management system) offers access to all stakeholders of the classified information through their secured login on the University web portal
- Public Information Officer (PIO) at University level for providing the correct/ unambiguous information. The generic RTI quires and replies sent are also posted on The University Web site.
- HOD at department level
    - In this regards, meetings at department level are being organized and minutes of the meeting are displayed at the University web site
    - Through the University management system (UMS) , all the departmental information are available online.

(Instruction: Availability and dissemination of information through the Internet. Information provisioning in accordance with the Right to Information Act, 2005).

8.3. Budget Allocation, Utilisation, and Public Accounting (10)

Summary of current financial year's budget and the actual expenditure incurred (exclusively for the university/Institute) for three previous financial years are given at **Annexure B**

- Internal Audit
- Chartered Accountant (CA) Audit
- Accountant General (AG) U.P., Allahabad Audit

(Instruction: The preceding list of items is not exhaustive. One may add other relevant items if applicable.)

8.3.1. Adequacy of budget allocation (4)

Refer Annexure B

Budget is adequate for routine requirement of the department. In case of more budget requirement for the developmental activities, the proposal is required to be sent to the University for the allocation.

(Instruction: Here the institution needs to justify that the budget allocated over the years was adequate.)

8.3.2. Utilisation of allocated funds (5)

Refer Annexure B

(100% utilization of allocated funds by the department)

(Instruction: Here the institution needs to state how the budget was utilised during the last three years)

8.3.3. Availability of the audited statements on the institute's website (1)

All the audited statements are available on the University website

(Instruction: Here the institution needs to state whether the audited statements are available on its website.)

8.4. Programme Specific Budget Allocation, Utilisation (10)

Summary of budget for the CFY and the actual expenditure incurred in the CFYm1 and CFYm2 (exclusively for this programme in the department):

Items	Budgeted in 2015-2016*	Actual expenses In 2015-2016 (till...)	Budgeted in 2014-2015#	Actual Expenses in 2014-015#	Budgeted in 2013-2014#	Actual Expenses in 2013-2014#	Budgeted in 2012-2013#	Actual Expenses in 2012-2013#
Laboratory equipment	1.00	yeat yet to b	30.00	30.00	15.00	4.57	7.60	7.39

Software	2.00		30.00	26.40	20.00	18.47	60.00	56.23
Laboratory consumable	1.00		12.28	12.28	06.00	5.76	12.00	6.08
Maintenance and spares	10.00		190.45	190.45	85.00	49.56	65.00	54.50
Training and Travel	1.00		37.15	37.15	20.00	18.03	17.50	17.25
Miscellaneous expenses for academic activities	0.50		03.30	03.30	03.00	2.37	3.00	11.52
Total	15.50		303.18	299.58	149.00	98.76	165.10	152.97

*A part from the provisioned budget extra fund are made available depending upon genuinity of need in the department.
Till 2014-15 department wise separate allocation was not made. The central budget was distributed as per need.

8.4.1. Adequacy of budget allocation (5)

The head of department is having purchase capability of rupees one lac by approval through departmental purchase committee. For the purchase of item more than one lac, it is done via central purchase committee of the university.

(Instruction: Here the institution needs to justify that the budget allocated over the years was adequate.)

8.4.2 Utilisation of allocated funds (5)

The allocated funds of the department are being utilized in due time.

(Instruction: Here the institution needs to state how the budget was utilised during the last three years.)

8.5. Library (20)

8.5.1 Library space and ambience, timings and usage, availability of a qualified librarian and other staff, library automation, online access, networking, etc. (5)

(Instruction: Provide information on the following items.).

- Carpet area of library (in m2)- 1779.128
- Reading space (in m2)- 178.37
- Number of seats in reading space-350
- Number of users (issue book) per day -450
- Number of users- (reading space) per day-550
- Timings: During working day, weekend, and vacation -9.00 am to 9:00 pm
- Number of library staff-13
- Number of library staff with degree in Library –01(Dy. Librarian)
- Management Computerization for search- "SOFTGRANTH", Library Automation Software is being used.
- Indexing, issue/return records Bar coding used-Yes
- Library services on Internet/Intranet INDEST or other similar membership archives IEEE,ASME,ASCE, Springer India, Delnet E-Journal

8.5.2. Titles and volumes per title (4)

Number of titles-18165
Number of volumes-109842
Total e-books-1444

	Number of new titles added	Number of new editions added	Number of new volumes added
CFYm2	187	715	2100
CFYm1	263	843	3705
CFY	Under process Hard Copy	885 e-books	885 e-books

8.5.3 Scholarly journal subscription (3)

	Details	CFY	CFYm1	CFYm2	CFYm3
Science	As soft copy	312			
	As hard copy	14	06	06	06
As hard copy	As soft copy	715			
	As hard copy	55	47	47	48
Pharmacy	As soft copy	Nil	Nil	Nil	Nil
	As hard copy	Nil	Nil	Nil	Nil
Architecture	As soft copy	Nil	Nil	Nil	Nil
	As hard copy	Nil	Nil	Nil	Nil
Hotel Management	As soft copy	Nil	Nil	Nil	Nil
	As hard copy	Nil	Nil	Nil	Nil

8.5.4Digital Library (3)

Availability of digital library contents	e-books-1444 e-journals available over intranet-1027
If available then mention number of courses	For all courses
Availability of an exclusive server	Available
Availability over Intranet/Internet	Available
Availability of exclusive space/room	Available
Number of users per day	Approximately 150

8.5.5 Library expenditure on books, magazines/journals, and miscellaneous contents (5)

Year	Details				Comment if any
	Book	Magazines/ Journals (for hard copy Subscription)	Magazines/ Journals (for soft copy Subscription)	Misc. Content e-book	
CFYm1	748694	172740	-------	996510	
CFYm2	1042015	196284			
CFYm3	Under process	265946	1251500	976575	

8.6. Internet (5)

- Name of the Internet provider: NKN(National Knowledge Network & BSNL)
- Available bandwidth: 1 Gbps (NKN), 10Mbps (BSNL)
- Access speed:1 Gbps(NKN), 10Mbps (BSNL)
- Availability of Internet in an exclusive lab: 24 Hours**.**
- Availability in most computing labs: 24 Hours**.**
- Availability in departments and other units: 24 Hours**.**
- Availability in faculty rooms:24 Hours.
- Institute's own e-mail facility to faculty/students: Yes, domain@mmmut.ac.in
- Security/privacy to e-mail/Internet users: Cyberroam Yes, intimate through online internet facility

(Instruction: The institute may report the availability of Internet in the campus and its quality of service.)

8.7. Safety Norms and Checks (5)

8.7.1. Checks for wiring and electrical installations for leakage and earthing (1)

- Periodic maintenance
- Rubber sheet matting in the labs where Voltage is 440 V.
- Shoes are compulsory in Labs.
- Sign of "danger" at appropriate places.
- Fire-Extinguishers.
- Adequate measures have been taken to ensure proper earthing

8.7.2. Fire-fighting measurements: Effective safety arrangements with emergency / multiple exits and ventilation/exhausts in auditoriums and large classrooms/laboratories, fire-fighting equipment and training, availability of water, and such other facilities (1)

- Sufficient numbers of Fire Extinguisher are available in the departments, Labs, Corridors with annual checking.
- Ventilators/ Exhaust fans are in the labs, auditorium, workshop, etc.
- Drinking water supply by two pumps for 12 hours
- Water connections in the departments, Lawns, auditorium, etc.
- Water purifier is available in the department, hostels and mess for clean water supply
- Supervisor for maintaining and cleaning lawns
- Ambulance is available on immediate call

8.7.3. Safety of civil structure (1)

- All academic & residential buildings of the university have been constructed following the building norms as prescribed by PWD/CPWD/Other regulatory bodies.
- Most of the buildings have been constructed by government construction agencies which are solely responsible for adhering to all norms as applicable from time to time. Thus the buildings are completely safe which is also evident from no loss/damage during the different earthquake tremor in the past.
- Further maintenance of all buildings is done by the maintenance & construction department of the university.

- In case of the building needing major repair/demolition. The building works committee makes the holistic assessment & necessary actions are taken accordingly.

8.7.4. Handling of hazardous chemicals and such other activities (2)

(Instruction: The institution may provide evidence that it is taking enough measures for the safety of the civil structures, fire, electrical installations, wiring, and safety of handling and disposal of hazardous substances. Moreover, the institution needs to show the effectiveness of the measures that it has developed to accomplish these tasks.)

The hazardous materials and garbage are disposed by

- Tractor/trolley
- Hazards chemicals are being handled carefully with Gloves, Apron etc.
- Hand pulling trolleys
- Solid waste treatment
- Sweepers

8.8. Counselling and Emergency Medical Care and First-aid (5)

- **Availability of counseling facility(1)**
    - A counseling and carrier guidance cell headed by Dr. K. G. Upadhyay is available for the students to improve their personality, academic results, etc.
    - For first years students, there is teacher-guardian scheme in a ratio 1:10
    - A Psychologist is appointed for the counseling and guidance.

- **Medical Care(2)**
    - Number of Medical practitioners: 02
    - Number of nursing staff: 02
    - Physiotherapist (part time): 01
    - Ambulance (7 × 24 hrs): 01
- Arrangement for emergency medical care
    - Pathology collection centre
    - Four beds ward
    - Allopathic and Homeopathic medicines are fully provided to students and staff
    - Mini physiotherapy centre
    - Medical Insurance of all students
- Medical facility nearby area
    - Community Health Centre (Govt.) Khorabar Block
    - District Civil Hospital
    - Medical College
    - Various modern(super specialized) private nursing homes

- Number of ambulances within the University:**01**
    - Available immediate round the clock on call
- **Availability of First-Aid Unit(2)**: YES

(Instruction: The institution needs to report the availability of the facilities discussed here.)

IX. Continuous Improvement (75)

This criterion essentially evaluates the improvement of the different indices that have already been discussed in earlier criteria.

From 9.1 to 9.5 the assessment calculation can be done as follows.

a, b and c are the values of variables, which correspond to either LYGm2, LYGm1 and LYG or CAYm2, CAYm1 and CAY respectively, after scaled down each of them to a maximum value of 1.

Assessment can be made as,
Assessment = (b-a) + (c-b) + (a+b+c) x (5/3)

9.1 Improvement in Success Index of Students (5)

From 4. 1
a, b and c are the success indices which correspond to LYGm2, LYGm1 and LYG respectively.

Items	**LYG(c)**	**LYG*m*1(b)**	**LYG*m*2(a)**	**Assessment**
Success index	1.00	0.96	0.98	4.92

9.2 Improvement in Academic Performance Index of Students (5)

From 4. 2
a, b and c are calculated respectively for LYGm2, LYGm1 and LYG by dividing the API values, obtained from the criterion 4.2, by 10. The maximum value of a, b, and c should not exceed one.

Items	**LYG (c)**	**LYG*m*1 (b)**	**LYG*m*2 (a)**	**Assessment**
API	0.72	0.72	0.74	3.62

9.3 Improvement in Student-Teacher Ratio (5)

From 5. 1
a, b and c are calculated respectively for CAYm2, CAYm1 and CAY by dividing the STR values, obtained from the criterion 5.1, by 15. The maximum value of a, b, and c should not exceed one.

Items	**CAY (c)**	**CAY*m*1 (b)**	**CAY*m*2 (a)**	**Assessment**
STR	0.99	0.95	0.83	4.78

9.4 Enhancement of Faculty Qualification Index (5)

From 5. 3

a, b and c are calculated respectively for CAYm2, CAYm1 and CAY by dividing the FQI values, obtained from the criterion 5.3, by 10. The maximum value of a, b, and c should not exceed one.

Items	CAY (c)	CAY*m*1 (b)	CAY*m*2 (a)	Assessment
FQI	0.66	0.65	0.67	3.30

9.5 Improvement in Faculty Research Publications, R&D Work and Consultancy Work (10)

From 5.7

a, b and c are calculated respectively for CAYm2, CAYm1 and CAY by dividing the FRP values, obtained from the criterion 5.7, by 20. The maximum value of a, b, and c should not exceed one.

Items	CAY (c)	CAY*m*1 (b)	CAY*m*2 (a)	Assessment
FRP	0.00	0.31	0.53	0.88

From 5.9

a, b and c are calculated respectively for CAYm2, CAYm1 and CAY by dividing the FRDC values, obtained from the criterion 5.9, by 20. The maximum value of a, b, and c should not exceed one.

Items	CAY (c)	CAY*m*1 (b)	CAY*m*2 (a)	Assessment
FRDC	0.45	0.45	0.43	2.23

9.6 Continuing Education (10)

In this criterion, the institution needs to specify the contributory efforts made by the faculty members by developing the course/laboratory modules, conducting short-term courses/workshops, etc., for continuing education during the last three years.

Module description	Any other contributory institute/industry	Developed/organized by	Duration	Resource persons	Target audience	Usage and citation, etc.
Refresher Program on 'Design, Construction & Maintenance of Rural Roads	Rural Engg. Dept., Lucknow,	Civil Engg. Dept. MMMUT,Gkp	June 11-13,2013	Faculty Civil Engg. Dept. MMMUT, Gkp	Engineers of Rural Engg. Dept.,U.P.	Training Material for field practices
Refresher Program on 'Design, Construction	Rural Engg. Dept., Lucknow,	Civil Engg. Dept. MMMUT,Gkp	July 02-04,2013	Faculty Civil Engg. Dept. MMMUT, Gkp	Engineers of Rural Engg. Dept.,U.P.	Training Material for field practices

&Maintenance of Rural Roads						
Refresher Program on 'Design, Construction & Maintenance of Rural Roads	Rural Engg. Dept., Lucknow,	Civil Engg. Dept. MMMUT,Gkp	Sept. 03-05,2013	Faculty Civil Engg. Dept. MMMUT, Gkp	Engineers of Rural Engg. Dept.,U.P.	Training Material for field practices
Recent Advances in Civil Engineering	TEQIP-II(MHRD)	Civil Engg. Dept. MMMUT,Gkp	May 22-23, 2014	From Various Institutions	Delegates from Academia, Research Institutions and Industries	Proceedings of RACE'14 published with ISBN No.
Training Program on 'Earthquake Resistant Design of Buildings and Rigid Pavements'	Rural Engg. Dept., Lucknow	Civil Engg. Dept. MMMUT,Gkp	Feb 21-23,2015	Faculty Civil Engg. Dept. MMMUT, Gkp	Engineers of Rural Engg. Dept.,U.P.	Training Material for field practices.
Training Program on 'Earthquake Resistant Design of Buildings and Rigid Pavements'	Rural Engg. Dept., Lucknow	Civil Engg. Dept. MMMUT,Gkp	March 21-23,2015	Faculty Civil Engg. Dept. MMMUT, Gkp	Engineers of Rural Engg. Dept.,U.P.	Training Material for field practices.
Training Program on 'Earthquake Resistant Design of Buildings and Rigid Pavements'	Rural Engg. Dept., Lucknow	Civil Engg. Dept. MMMUT,Gkp	April 8-10,2015	Faculty Civil Engg. Dept. MMMUT, Gkp	Engineers of Rural Engg. Dept.,U.P.	Training Material for field practices.

Assessment =

9.7 New Facility Created (15)

Specify new facilities created during the last three years for strengthening the curriculum and/or meeting the POs:

- Respirable Dust Sampler 2012-13
- Total Station Surveying facility was created in 2013-14…..
- Tilting Flume for model studies of hydraulic structures in 2014-15

9.8 Overall Improvements since last accreditation, if any, otherwise, since the commencement of the programme (20)

Since the last accreditation the department has increased intake from 45 to 60 in 2010 and later 60 to 120 in 2015. The necessary refurbishment and restructuring departmental classroom and other facilities have been carried out as per requirement. In addition the following lab facilities have been added appropriately in the corresponding labs.

Specify the overall improvement:

Specify the strengths/ weakness	Improvement brought in	Contributed by	List the PO(s), which are strengthened	Comments, if any
2015-16				
2014-15	Tilting flume	UGC	a,b,e	
2013-14	Total Station	TEQIP II	a,e	
2012-13	Respirable Dust Sampler with Gaseous Sampling attachment	Central Pollution Control Board(C.P.C.B)	e,g	
2011-12	SPT Analyzer	AICTE	a,b,e	
2010-11	Web based Video and Lectures installed on college intranet	NPTEL	a,c,d,e,l	
2009-10	Non-Destructive Testing Facility	Internal Sources	d,e,f	
2008-09	AUTOCAD2009, MAP 3D, AND CIVIL 3D software installed	TEQIP-I	a,c,e	

Declaration

The head of the institution needs to make a declaration as per the format given below:

This Self-Assessment Report (SAR) is prepared for the current academic year () and the current financial year ( ) on behalf of the institution.

I certify that the information provided in this SAR is extracted from the records and to the best of my knowledge, is correct and complete.

I understand that any false statement/information of consequence may lead to rejection of the application for the accreditation for a period of two or more years. I also understand that the National Board of Accreditation (NBA) or its sub-committees will have the right to decide on the basis of the submitted SAR whether the institution should be considered for an accreditation visit.

If the information provided in the SAR is found to be wrong during the visit or subsequent to grant of accreditation, the NBA has right to withdraw the grant of accreditation and no accreditation will be allowed for a period of next two years or more and the fee will be forfeited.

I undertake that the institution shall co-operate the visiting accreditation team, shall provide all desired information during the visit and arrange for the meeting as required for accreditation as per the NBA's provision.

I undertake that, the institution is well aware about the provisions in the NBA's accreditation manual concerned for this application, rules, regulations and notifications in force as on date and the institute shall fully abide to them.

Place: Signature, Name and Designation
Date: of the Head of the Institution with seal