

To be a State of the Art Institution of Engineering in pursuit of excellence, in the service of society.

- ◆ To excel in providing quality education at undergraduate and graduate levels.
- ◆ To encourage research and innovation.
- ◆ To provide infrastructure and facilities to meet the latest technological needs.
- ◆ To establish Centres of Excellence through active interaction with industry.
- ◆ To nurture students towards holistic development with human values and ethics.



# DEPARTMENT OF CIVIL ENGINEERING

#### Vision:

To be a Centre for quality education and research in the field of civil Engineering Misson:

- To provide a well-balanced curriculum with practical exposure to meet the programme educational objectives and outcomes.
- To enhance the competence of faculty through continuous teaching learning process.
- To provide state of art laboratories equipped with the modern hardware and software.
- To encourage technical skills of non-teaching staff.
- To provide research opportunities for faculty and students.
- To create employability skills in students.
- To inculcate in students the importance of social responsibilities.

# ABOUT DEPARTMENT

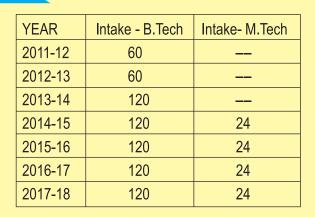
- Civil Engineering Department was established in the academic year 2011-2012 with an intake of 60 for B.Tech. and has been increased to 120 from the academic year 2013-14.
- Department also offers M.Tech. Programme in Structural Engineering with an intake of 24 from the year 2014-2015.
- Department has 01 Emeritus Professor, 07 Professors, 04 Associate Professors and 24 Assistant Professors.
- Dr. K.Rama Sastri, the former Professor, Registrar & Rector of Jawaharlal Nehru Technological University, Hyderabad, is the Emeritus Professor of the Civil Engineering Department and also the Director of CVR College of Engineering.
- Dr. M.V. Seshagiri Rao, the former Professor of Jawaharlal Nehru Technological University, Hyderabad, is the Professor of Civil Engineering Department and Dean Planning & Coordination.
- Dr. N.Narayana, the former Joint Director (Principal Scientist) of National Council of Cement and Building Materials, Hyderabad, is the Professor of the Civil Engineering Department.

- Dr. N. Muralikrishna, the former Professor of Osmania University, Hyderabad, is the Professor of Civil Engineering Department.
- Dr. T. Muralidhara Rao, the former Professor and Principal of JNTU affiliated Engineering College, is the Professor and Head of the Department.
- Dr. B. Naga Malleswara Rao, the former Professor and Vice-Principal of JNTU affiliated Engineering College, is the Professor of Civil Engineering Department, NBA coordinator & Associate Dean (Approvals & Accreditations)
- Dr. Sasank Sekhar Hota, former Professor of Biju Patnaik University, is the Professor in Civil Engineering Department. His area of specialization is Structural Engineering.
- Dr. K. Madhusudan Reddy, Former Professor & Head of the Civil Department in JNTU affiliated Engineering College, is the Professor in Civil Engineering Department. His area of Specialization is Geo Technical Engineering.
- Dr. Sadguna Nuli, former Associate Professor of Deemed Univeristy, Chennai, is the Associate Professor of Civil Engineering Department. His area of specialization is Transportation Engineering.
- All the teaching faculty of the department are post-graduates with first class in UG & PG degrees.
- Department has well equipped laboratories which have been established at a cost of around Rs.1.5 Crore.
- Department also undertakes testing of Soil, Cement, Concrete, Highway Materials, Bricks, Wood, Steel, Water and Wastewater Analysis, Consultancy works and R&D works.

# MILE STONES <

- 2011-12 (Intake of 60 students under regular admission.
- 2012-13 (Survey lab and Engineering Geology labs were established.
- 2013-14) (Civil Engineering Association was formed to conduct co-curricular activities for the students.
- 2013-14) (Intake admission increased from 60 to 120 students.
- 2013-14) (Geotechnical Engineering lab was established.
- 2014-15 (Cement & Concrete lab, Environmental Engineering labs were established.
- 2014-15) (First batch of Civil Engineering Students graduated.
- 2014-15) (Structural Engineering lab was established.
- 2014-15) (M. Tech. programme in Structural Engineering was started with an intake of 24.
- 2016-17 Advanced Concrete Technology Lab was established
- 2017-18 (Research Lab was established with 100T loading frame(automated)

# STUDENT INTAKE YEAR WISE



# TEACHING STAFF, QUALIFICATION, DESIGNATION WITH SPECIALIZATION

S. No.	Name of the Faculty	Highest Qualification	University	Designation	Specialization
1	Dr. K. Rama Sastri	Ph.D.	IITM	Director & Emeritus Professor	Geotechnical Engineering
2	Dr. M.V. Seshagiri Rao	Ph.D.	JNTU-H	Professor & Dean – Planning and Coordination	Structural Engineering
3	Dr. N Murali Krishna	Ph.D.	NITW	Professor	Structural Engineering
4	Dr. N. Narayana	Ph.D.	OU	Professor	Geology
5	Dr. T. Muralidhara Rao	Ph.D.	NITW	Professor & Head of the Department	Structural Engineering
6	Dr. B. Naga Malleswara Rao	Ph.D.	NITW	Professor, Associate Dean (Approvals & Accreditations)	Water Resources Engineering
7	Dr. Sasank Sekhar Hota	Ph.D.	Jadhavpur University	Professor	Structural Engineering
8	Dr. K. Madhusudan Reddy	Ph.D.	IIT Delhi	Professor	Geotechnical Engineering
9	Dr. Sadguna Nuli	Ph.D.	IIT-Bombay	Associate Professor	Transportation Engineering
10	Mr. M.R Rajagopal	M.E, PMP	BITS - PILANI	Associate Professor	Civil Engineering
11	Mr. A. Vamshi Chaithanya	M.S.	Florida International University, U.S.A.	Associate Professor	Transportation Engineering
12	Mr. Yashwanth Pamu	M.E.	OU	Associate Professor	Construction Engineering Management

S. No.	Name of the Faculty	Highest Qualification	University	Designation	Specialization
13	Mr. N. Ramanjaneyulu	M.Tech.	JNTUH	Assistant Professor	Structural Engineering
14	Mr. S. Praveen	M.Tech.	IIT-Roorkee	Assistant Professor	Transportation Engineering
15	Ms. J. Sandhya Rani	M.Tech.	OU	Assistant Professor	Structural Engineering
16	Mr. K. Ravi Chandra Reddy	M.E.	University of Detroit, U.S.A.	Assistant Professor	Environmental Engineering
17	Ms.S.Jyothsna Reddy	M.Tech.	JNTUH	Assistant Professor	Infrastructure Engineering
18	Ms. P. Divya	M.Tech.	JNTUH	Assistant Professor	Transportation Engineering
19	Mrs. Sharmista Masih	M.Tech.	NIT Surathkal	Assistant Professor	Construction Technology & Management
20	Ms.G. Sharanya	M.Tech.	JNTUH	Assistant Professor	Highway Engineering
21	Ms. N. Maragatham	M.Tech.	ISM- Dhanbad	Assistant Professor	Environmental Engineering
22	Mr. V. Naveen	M.Tech.	JNTUH	Assistant Professor	Structural Engineering
23	Mr. M. Vamsi	M.Tech.	JNTUH	Assistant Professor	Transportation Engineering
24	Ms. V. Yashodha	M.Tech.	ANU	Assistant Professor	Structural Engineering
25	Mr. T. Manoj	M.Tech.	JNTUH	Assistant Professor	Structural Engineering
26	Mr. K. Mahesh	M.Tech.	JNTUH	Assistant Professor	Highway Engineering
27	Mr. G. Sai Anvesh	M.Tech.	IIT- Kharagpur	Assistant Professor	Transportation Engineering
28	Mr. K. N. V. Chandra Shekar	M.Tech.	IITB	Assistant Professor	Structural Engineering
29	Mr. M Ashok Kumar	M.Tech.	JNTUH	Assistant Professor	Geotechnical Engineering
30	Mr. B. Ramanjaneyulu	M.Tech.	JNTUH	Assistant Professor	Geotechnical Engineering
31	Mr. D. Srinivas Nayak	M.Tech.	IIT-Kharagpur	Assistant Professor	Geotechnical Engineering
32	Mr. P. Ramakrishna	M.Tech.	IIT-Delhi	Assistant Professor	Transportation Engineering
33	Mr. Chilveri Srinath	M.Tech.	NIT-Trichy	Assistant Professor	Transportation Engineering
34	Mr. Bommisetty Jagadeesh	M.Tech.	NITW	Assistant Professor	Engineering Structures
35	Mr. Emmadi Srikanth	M.Tech.	NITW	Assistant Professor	Geotechnical Engineering
36	Mr. T. Sai Keerthan	M.Tech.	JNTUH	Assistant Professor	Structural Engineering

#### **FACULTY PROFILE**



Dr. K. RAMA SASTRI
Emeritus Professor & Director, CVR College of Engineering
B.E.(Hons.)., M.E.(IISc), Ph.D. (IIT Madras)

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Email: director@cvr.ac.in

Specialization: Geotechnical Engineering

**Experience:** He was the Rector, Jawaharlal Nehru Technological University (JNTU) Hyderabad, until July 2002. He had held a wide variety of academic and administrative positions including Professor, Head of Department, Vice-Principal, Principal, Director and

Registrar, JNTU prior to becoming the Rector of the University. He has published over 25 papers in National and International Journals and Conferences and he has guided more than 30 M.Tech. Projects. He was also the honorary recipient of the Andhra Pradesh State Government "Best Teacher Award" for the University Teacher Category for the year 1994.

He was the Principal of the CVR College of Engineering during 2002-2007. Under his leadership, CVR College has expanded in different directions, excelling in various engineering disciplines. He took charge as the Director in 2008.



Dr. M.V. SESHAGIRI RAO

Professor of Civil Engineering and Dean (Planning and Coordination)

M.Tech. M.S., Ph.D.

Email: sheshagiri.rao@cvr.ac.in

**Specialisation:** Structural Engineering

Professional Bodies Membership: LM-ISTE, ICI, FIE, MIWRS

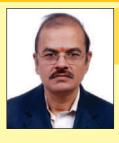
He is a double postgraduate in Structural Engineering and Software Engineering with Ph.D. in Civil Engineering. He brings on-board rich, vast and varied experience of 38 years in

Research, Teaching, Consultancy and Construction. Prior to his current stint at CVR College of Engineering, his portfolio includes key roles of Project Engineer, Project Officer for the UGC Academic college building, Head of the Civil Engineering Department, Vice Principal, Director, BICS and Chief Engineer, BOS Chair-person, Member - Board of Governors, Coordinator for Academic and Research and Coordinator for NBA Nodal Centre at Jawaharlal Nehru Technological University (JNTU), Hyderabad.

He published over 195 research papers and won 09 awards for his publications and works. He was the "Outstanding Concrete Technologist" in 2006, awarded by the INDIAN CONCRETE INSTITUTE for his contribution to the field of Concrete Technology and received the "BEST TEACHER AWARD" from the Government of A.P. in 2009 apart from several other awards for his papers. He guided 23 Ph.D. scholars on Special Concretes and more than 150 M.Tech. Projects as on date. He has successfully completed R&D projects sanctioned by DST, AICTE and other agencies.

He is a member of the program "Capacity Building of Civil Engineers in Earthquake Risk Management" by MHRD for training field Engineers in Earthquake Risk Management. He is also an expert member of UGC, AICTE, UPSC and APPSC. He has published two books on ENGINEERING MECHANICS and CONCRETE TECHNOLOGY.

- ♦ Convener- Research & Development and Consultancy Committee, CVRCED
- ♦ Convener-Project Review Committee, CVRCED
- Member-Academic Audit Committee, CVRCED



Dr. N. MURALI KRISHNA Professor B.E. (AU), M. Tech. (IIT-B), PhD (NIT-W)



**Specialisation:** Structural Engineering **Professional Bodies Membership:** LM-ISTE

**Experience: Academic:** Faculty member in Osmania University for 33 years. Apart from teaching, he held the positions of Special Officer (Infra-structure), Director (IDIC), Head of

the Department and Chairman, Board of Studies for Civil Engineering at Osmania University.

**Research & Publications:** He is at present guiding five research scholars in OU for their doctoral works. To date he has guided more than 100 M.E. (Dissertation) works at OU. He has 2 International Journal Publications and more than 50 national/international publications in conferences/seminars.

**Consultancy**: Carried-out structural consultancy works on behalf of OU in following areas:

- ♦ Structural designing of RCC & Steel Structures
- Proof checking of structural designs

◆ Third party quality control checks

Advisor and management committee member

#### Areas of Interest:

- ◆ Structural Mechanics & Matrix Methods of Structural Analysis
- ◆ Finite Element Methods

◆ Applications of Artificial Neural Networks.

- ♦ Structural Dynamics
- Member-Research & Development and Consultancy Committee, CVRCED
- Member-Project Review committee, CVRCED



Dr. N. NARAYANA Professor M.Sc, Ph.D.(Osmania)

Email: dr.narayana@cvr.ac.in

Specialization: Petrology, Geochemistry
Professional Bodies Membership: MEAI, OGAA
Additional responsibilities at CVR:

- Convener-Internal Quality Assessment Cell
- Convener- Budget and Finance Committee
- Professor In-Charge Civil Engineering Association
- Professor In-Charge Engineering Geology Lab
- Member-Research & Development and Consultancy Committee

**Experience:** Industry – 27 Years, Teaching - 04 Years

He formerly worked as Joint Director (Principal Scientist) of National Council of Cement and Building Materials, Delhi. He has 27 years of service. Presently, he is a Professor in the department.

**Publications/Conferences:** National Journals – 16, Books -03

National & International Conferences – 25,

R&D Projects – 11, SP Projects – 42



Dr. T. MURALIDHARA RAO Professor & Head of the Department B.Tech., M.E., Ph.D.(NITW)

Email: tmuralidhararao@cvr.ac.in

Specialization: Structural Engineering

Professional Bodies Membership: LM-ISTE, FIE, ICI, ISC

Additional responsibilities at CVR:

- Chairman-Board of Studies
- Convener- Department Development Committee
   Convener- Mini Project Review Committee
  - Member Dept. Acad. Committee

     Member Project Review committee
- Member- Class Review committee 

   Member Budget & Finance Committee
- Member-Research & Development and Consultancy Committee
- Editorial Member-CVR Journal of Science & Technology

#### Experience: Teaching - 25 Years

He formerly worked as a Professor, Head of the Department, Dean and Principal in JNTU affiliated engineering colleges. He has 25 years of teaching experience. He guided 18 B.Tech. and 02 M.Tech. projects. Presently, he is the Professor and Head of the Department.

#### Areas of Interest:

Fracture Mechanics of Concrete

Fibre Reinforced Concrete

Nano Concrete

**Publications/Conferences:** International Journals – 09, National Journals –09, National Conferences -12.



Dr. B. NAGA MALLESWARA RAO
Professor & Associate Dean (Approvals & Accreditation)
AMIE, M. Tech.(NITW)., Ph.D.(NITW)

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Email: bnmrao@cvr.ac.in

**Specialization:** Water Resources Engineering

Professional Bodies Membership : LM-ISTE, FIE, IAHS, MIAH, MIUT, IEI

Additional responsibilities at CVR:

- Coordinator NBA
   Member BoS
- Convener Dept. Acad. Committee
- Member Budget & Finance Committee
- Member-IQAC
- Member- Research & Development and Consultancy Committee

# Experience: Teaching: 18 Years, Industry: 04 Years

He formerly worked as Professor, Head of the Department, Dean - Academics and Vice-Principal in JNTU affiliated engineering colleges. He has 22 years of teaching experience. Presently he is the Professor of Civil Engineering & Associate Dean (Approvals & Accreditation) of College

**Publications / Conferences:** International Journals — 05, National Journals —3, International Conferences -15, National Conferences -19



Dr. SASANK SEKHAR HOTA
Professor
B.Sc. (Engg) (Utkal Univ., Bhubaneswar),
Ph.D. (Jadhavpur Univ., Kolkata)

Email: sasanksekharhota@cvr.ac.in

**Experience: Teaching:** 30 Years. Has served in many engineering colleges in Odisha State prior to joining CVR College of Engineering. Has vast and rich teaching and research experience of three decades.

Additional responsibilities at CVR:

- Member-Research & Development and Consultancy Committee
- Member- Department Development Committee

**Publications / Conferences:** International Journals – 07, National & International Conferences – 08, Filed one patent titled "Rapid Curing Agent"

Areas of Interest:

- Finite Element Analysis of Fibre Reinforced Laminated Composites
- Accelerated curing of Precast concrete



Dr.K.Madhusudan Reddy Professor B.E ,M.Tech(NIT Allahabad), Ph.D. (IIT Delhi)

Email: kmr@cvr.ac.in

Specialization: Geotechnical Engineering

**Experience:** Has vast Industrial experience of nine years in different specializations of Civil Engineering & worked in well-known companies like IVRCL, Progressive Constructions Ltd, Nagadi Consultants Pvt. Ltd.etc., located in different parts of the Country. He has also involved in international project (National Highway Project) in SUDAN during the year, 2004 -2005. He has

teaching experience of about three years and pursued PhD as fulltime research scholar, under MHRD fellowship

Publications / Conferences: International Journals - 02

National & International Conferences - 05

#### Areas of Interest:

Pile Foundations

Soil Exploration (Site Investigations)

- Ground Improvement
- Slope Stability



**Dr. SADGUNA NULI Associate Professor**B.Tech., M. Tech(NIT-Trichy), Ph.D.(IIT-Bombay)

Email: sadgunanuli@cvr.ac.in

**Specialization:** Transportation Engineering **Professional Bodies Membership:** LM-ISTE

**Experience: Teaching**: 10 Years Additional responsibilities at CVR:

Member- Research & Development and Consultancy Committee

Member- Department Development Committee

- Class Teacher (III Yr- A)
- Faculty Advisor (IV Yr-A)

Publications / Conferences: International Journals - 04, International Conferences - 02



Mr. M. R. RAJAGOPAL **Associate Professor** B.Tech., M.E. Civil (BITS, Pilani), PMP

Email: mr.rajagopal@cvr.ac.in

Certificate in Global Business Leadership from Harvard Business Publishing.

Specialization: Civil Engineering

Additional responsibilities at CVR: • Continuous Internal Evaluation (CIE) Coordinator

- Dept. I/c CVR News Letter Co-ordinator Dept. Brochure Co-ordinator
- Faculty Advisor (IV Yr-B)

Member of Academic Audit Committee

Experience: Industry – 19 years, Teaching – 2 years

He has a vast and global corporate IT industry experience from TCS, IBM, Tech Mahindra and HSBC. Has a global consulting experience having worked in Canada, USA, UK, Sweden, Australia, Germany and China. He has the structural design experience from MN Dastur & Co, Kolkata. Certified Project Management Professional (PMP) from PMI, USA.

Publications/Conferences: National Conference - 1



Mr. YASHWANTH PAMU Associate Professor M.E. (Ph.D.- Pursuing at OU)

Email: yashwanth.pamu@cvr.ac.in

Specialization: Construction and Engineering Management

Professional Bodies Membership: LM-ISC Experience: Teaching - 3 years, Industry - 2 years

Additional responsibilities at CVR: Member-BOS

Convener-Class Review Committee

Class Teacher (II Yr-A)

I/c Fluid Mechanics & Hydraulic Machines Laboratory

Faculty Advisor (II Yr-A)

Main Project Coordinator



Mr. A. VAMSHI CHAITANYA

**Associate Professor** 

M.S. (USA), (Ph.D.- Pursuing at OU)

Email: a.vamshichaitanya@cvr.ac.in

**Specialization:** Transportation Engineering

**Experience:** Teaching - 4 years Additional responsibilities at CVR:

Faculty Invigilation I/c
 Class Teacher (III Yr-B)
 Faculty Advisor (IV Yr-B)



Mr. N. RAMANJANEYULU

Asst. Professor

M.Tech. (JNTUH)., (Ph.D.- Pursuing at JNTUA)

Email: n.ramanjaneyulu@cvr.ac.in

Specialization: Structural Engineering Professional Bodies Membership: LM-ISTE **Experience:** Teaching - 7 years, Industry - 3 years

Additional responsibilities at CVR: • Member-Board of Studies

Coordinator-M. Tech. Structural Engineering Programme

Class Teacher (II Yr-B) I/c Research Lab Faculty Advisor (II Yr-B)

Publications / Conferences: International Journals – 1, International Conferences -1.



Mr. S. PRAVEEN
Asst. Professor
M.Tech. (ITR), (Ph.D.- Pursuing at OU))

Email: s.praveen@cvr.ac.in

Specialization: Transportation Engineering Professional Bodies Membership: LM-ISTE, ISC

Experience: Teaching - 4 years

Additional responsibilities at CVR: • Faculty Advisor (II Yr-A) • Main Project Coordinator

Attendance Coordinator (III Yr – A&B)
 I/c Highway Material Testing Laboratory

Publications / Conferences: National Journals - 3



Mrs. J. SANDHYA RANI Asst. Professor M.E., (Ph.D.- Pursuing at JNTUH)

Email: j.sandhyarani@cvr.ac.in

**Specialization:** Structural Engineering **Experience:** Teaching - 4 years

Additional responsibilities at CVR:
 I/c Dept. Minutes of Meeting
 I/c Structural Engg. Lab
 Class Teacher (III Yr-A)

Publications / Conferences: International Journals - 1



Mr. K. RAVI CHANDRA REDDY Asst. Professor

Email: krc.reddy@cvr.ac.in

Specialization: Environmental Engineering
Experience: Teaching - 5 years, Industry -2 years

Additional responsibilities at CVR: • Class Teacher (III Yr-B) • Faculty Advisor (II Yr-B)

Department Library Incharge

Publications / Conferences: International Journals – 1, National Conferences – 2



Mrs. S. JYOTHSNA REDDY

**Asst. Professor** M.Tech.(JNTUH)

M.E. (U.S.A.)

Email: jyothsna.reddy@cvr.ac.in

Specialization: Infrastructure Engineering Professional Bodies Membership: AMIE

**Experience:** Teaching - 4 years

Additional responsibilities at CVR: • I/c Faculty Information (JNTUH\_FFC)

Faculty Advisor (II Yr-B)



Mrs. P. DIVYA Asst. Professor M.Tech.(JNTUH)

Email: p.divya@cvr.ac.in

**Specialization:** Transportation Engineering **Professional Bodies Membership:** LM-ISC

**Experience:** Teaching - 3 years

**Additional responsibilities at CVR:** • Faculty Advisor (II Yr-A)

Publications / Conferences: International Journals – 1, National Conferences – 4



Mrs. SHARMISTHA MASIH Asst. Professor M.Tech.(NIT, Surathkal)



Email: sharmistha@cvr.ac.in

Specialization: Construction Technology and Management

Experience: Teaching - 2 years

Faculty Advisor (IV Yr-A)



Ms. G. SHARANYA Asst. Professor M.Tech.

**(20** 

Email: g.sharanya@cvr.ac.in

**Specialization:** Highway Engineering **Experience:** Teaching – 2 years

Additional responsibilities at CVR: • I/c Time Table • I/c Environmental Engg. Lab

Co-ordinator Practical Examinations
 Member-IQAC

Class Teacher (IV Yr-B)
 Faculty Advisor (IV Yr-B)

**Publications/Conferences:** International Journals – 1, International Conferences – 1, National Conferences – 2



Ms. N. MARAGATHAM
Asst. Professor
M.Tech.

21

Email: n.maragatham@cvr.ac.in

**Experience:** Teaching – 2 years

Specialization: Environmental science and Engineering

Additional responsibilities at CVR: • Faculty Advisor (III Yr-A)



Mr. T. MANOJ Asst. Professor M.Tech. (JNTUH)

**22** 

Email: t.manoj@cvr.ac.in

Specialization: Structural engineering

**Experience:** Teaching – 2 Years

Additional responsibilities at CVR: • Time Table Co-ordinator • Faculty Advisor (III Yr-

B) • I/c Advanced Concrete Technology Lab • I/c Dept. Imprest Account



Mr. V. NAVEEN Asst. Professor M.Tech. (JNTUH)

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Email: vuppunaveen@cvr.ac.in

Specialization: Structural engineering

**Experience:** Teaching – 2 Year

Additional responsibilities at CVR: • I/C Cement & Concrete Lab

Faculty Advisor (III Yr-B)



Ms. V. YASHODHA Asst. Professor M.Tech. (Acharya Nagarjuna Univ.)



Email: vemalayashodha@cvr.ac.in

**Specialization:** Structural engineering **Experience:** Teaching – 2 Year

Additional responsibilities at CVR:

I/c Technical Seminars (M.Tech. Programme)

Class Teacher (IV Yr-A) • Faculty Advisor (IV Yr-A)



Mr. M. VAMSI Asst. Professor M.Tech. (JNTUH)

Email: mvamshi@cvr.ac.in

**Specialization:** Transportation Engineering

Professional Bodies Membership: LM-IRC, ISRS, AMIE, ISTE, ISC, ISH, ISRD

**Experience:** Teaching – 2 Year

Additional responsibilities at CVR:

Mini Project Co-ordinator

Civil Engineering Association (CEA) faculty Advisor

Placement Coordinator

Class Teacher (IV Yr-A)

Faculty Advisor (III Yr-B)

**Publications:** International Conferences – 1, National Conferences – 1



Mr. K. MAHESH Asst. Professor M.Tech. (JNTUH)

26

Email: k.mahesh@cvr.ac.in

**Specialization:** Highway Engineering **Professional Bodies Membership**: MISC

Experience: Teaching – 2 Year

Additional responsibilities at CVR: • Class Teacher (II Yr-A) • Placement Coordinator



Mr. G. SAI ANVESH Asst. Professor M.Tech.(IIT Kharagpur)

**2**7

Email: saianveshg@cvr.ac.in

**Specialization:** Transportation Engineering **Professional Bodies Membership:** MISC **Experience:** Teaching – 2 Year

Additional responsibilities at CVR: • I/c Department Library



Mr. K.N.V. CHANDRA SEKHAR

Asst. Professor

M.Tech.(IIT Bombay,) (Ph.D. - Pursuing at OU) **Email**: knvchandrasekhar@cvr.ac.in

**Specialization:** Structural engineering **Experience:** Teaching – 13 Years

**Publications:** International Conferences – 4, National Journals-12, International Journals-1

Additional responsibilities at CVR: • I/c Computer Aided Design Laboratory (M.Tech.)

Faculty Advisor (III Yr-A)



Mr. M. ASHOK KUMAR Asst. Professor M.Tech. (JNTUH)



Email: m.ashokkumar@cvr.ac.in

Specialization: Geotechnical engineering

Experience: Teaching - 1 Year

Publications: National Workshop - 1



Mr. B. RAMANJANEYULU Asst. Professor

M.Tech.(JNTUH)

Email: b.ramanjaneyulu@cvr.ac.in

**Specialization:** Geotechnical engineering **Professional Bodies Membership:** AMIE

Experience: Teaching – 1 Year

Publications: National Conference - 01, National Conference - 02



Mr. D. SRINIVAS NAYAK

Asst. Professor

M.Tech.(IIT-Kharagpur)

Email: srinivasnayak@cvr.ac.in

Specialization: Geotechnical Engineering

**Experience:** Industry – 2 years, Teaching – 4 years

Additional responsibilities at CVR: • I/c Soil Mechanics Lab • Class Teacher (III Yr-A)

Faculty Advisor (III Yr-A)



Mr. P.RAMAKRISHNA

Asst. Professor

M.Tech.(IIT-Delhi), (Ph.D.-Pursuing at JNTUH)

Email: p.ramakrishna@cvr.ac.in

**Specialization:** Transportation Engineering **Professional Bodies Membership:** LM-IAENG **Experience:** Industry – 1 year, Teaching – 7 years

Additional responsibilities at CVR: • I/c Surveying Laboratory • Class Teacher (IV Yr-B)

Mini Projects Coordinator

Publications / Conferences: International Journals – 1



Mr. CHILVERI SRINATH

**Asst. Professor** M.Tech.(NIT-Trichy)

Email: srinath.chilveri@cvr.ac.in

Specialization: Transportation Engineering and Management

Experience: Teaching – 1 year

Publications / Conferences: National Journals – 1, National Conferences – 1



Mr. BOMMISETTY JAGADEESH
Asst. Professor
M.Tech.(NITW)

Email: b.jagadeesh@cvr.ac.in

Specialization: Engineering Structures



Mr. EMMADI SRIKANTH Asst. Professor M.Tech.(NITW)

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Email: emmadisrikanth@@cvr.ac.in

Specialization: Geotechnical Engineering

Experience: Teaching - 2 years

Additional responsibilities at CVR: • Dept. Brochure Coordinator

Publications / Conferences: International Conferences - 1, National Conferences - 1



Mr. T SAI KEERTAN Asst. Professor M.Tech.(JNTUH)

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Email: saikeertan@cvr.ac.in

**Specialization:** Structural engineering

**Experience:** Teaching – 1 year

Additional responsibilities at CVR: • Class Teacher (II Yr-B)

### INCENTIVES, SKILL-UP GRADATION AND PROFESSIONAL ADVANCEMENT

**RESEARCH:** The College has been giving top priority for quality of teachers and acquiring higher qualification. To see that faculty pursue Ph.D., incentive is available to have 6-7 months of paid leave with salary and twice during Ph.D. work. Further an amount of Rs. 25,000 each is sanctioned thrice at different stages. This has helped many faculty to register with Universities like JNTU, OU, University of Hyderabad & other JNTU universities.



**RESEARCH PUBLICATIONS**: College is known for awarding many incentives to encourage research. For every publication, an incentive of Rs. 20,000/- is awarded based on the recommendation of Research Committee.

College has a research in-house journal published bi-annually with ISSN number 2277-3916 with 10 volumes already published. Faculty members writing a text book are rewarded with Rs. 20,000.

# A. Incentives for service Security

- Contributory Provident Fund for Faculty
- Employees Provident Fund for Non-Teaching Staff

- Group Insurance Scheme
- Interest free loan-So far, 56 employees are availing loan with outstanding amount of Rs. 20 Lakhs
- For Non-Teaching& Technical staff with salary below Rs.15000/- medical reimbursement of Rs.5000/- per annum is allowed.
- Crèche for infants and toddlers
- Maternity leaves are provided to the lady faculty
- Medical leaves are provided to the staff

#### B. Incentives for skill up gradation and professional advancement

- Higher start for Higher qualifications
- 2006 Revised Pay Scales implemented from 1st July 2011
- Incentive of Rs. 20,000/- for each textbook published by standard publisher
- Incentive for improvement of qualification. Yearly financial grant of Rs.10000/-for doing M.Tech. while in service on part-time basis for each of the 3 years period
- Incentive for Presentation of Paper in Conferences/ Seminars— Rs. 10,000/- is given to staff for a paper presented in Conferences / Seminars.
- payment of Rs.20000/- for an article/ paper published in a standard research Journal
- A staff member doing Ph.D. is given a total incentive amount of Rs. 75,000/- in three phases. In addition, he / she is given study leave with full pay for periods ranging upto 7.5 months. This will be granted twice during Ph.D. work.
- Travel Grant for presentations in the conferences
- International Travel Grant

#### C. Incentives to students

- Book Grant for Weaker sections.
- Management Supported Library for SC / ST Scholarship holders
- Campus Recruitment coaching classes for the students with the help of Experts.
- Merit Awards by the College. Cash and Gold Medals
- Registration fee and travel Gant for students presenting Technical papers
- Part financial support for students submitting technical papers in foreign countries



# PH.D. GUIDANCE

S. No	Name of the Supervisor	Particulars of Ph.D. Scholars	Research Topic	Status
1		Mr.G.V.Rama Rao AU College of Engg, Visakhapatnam	High Performance Rice husk ash cement concrete	Awarded
2		Mr. M.Ravindra Krishna SVH College of Engineering, Machalipatnam	Strength and Durability behaviour of Super Plasticized High Strength Concrete using combination of Mineral Admixtures	Awarded
3		Mrs.A.Vijaya Lakshmi Bangolore	Climate Responsive Building Envelope for Energy Efficient Buildings	Awarded
4		Mr. N.R. Dakshinamurty KITS,Warangal	A study on the stress-strain behaviour of fly ash concrete of different grades and its application in reinforced beams under flexure	Awarded
5	Dr. M.V. Seshagiri Rao	Ms. P. Sravana JNTUH College of Engg. Hyderabad	Behaviour of high volume fly ash concrete with high volume fly ash as an additional material for structural members and pavements	Awarded
6		Mr. A.Srinivasa Rao Chirala	Study of fracture behaviour and toughness indices of steel fibre reinforced concrete Under mode II loading	Awarded
7		Mr. T. Srinivas Vasavi College of Engg. Hyderabad	Studies on the behaviour of Fibre Reinforced Rice Husk Ash cement concrete	Awarded
8		Mr. T.Suresh Babu SVH College of Engg. Machilipatnam	A study on the mechanical behaviour of standard grade Ternary Blended Glass Fiber Reinforced Self Compacting Concrete and its application in flexure	Awarded
9		Mr. M.Veera Reddy KITS, Warangal	Study of Steel Fibre Reinforced High Strength Rice Husk Ash Cement Concrete under uniaxial compression and its application in flexure	Awarded

S. No	Name of the Supervisor	Particulars of Ph.D. Scholars	Research Topic	Status
10		Mr. S.Sunil Pratap Reddy Christu Jyoti institute of Technology and Sciences	A study on the performance of the bacterial concrete embedded with Bacillus Subtilis	Awarded
11		Mr. P.S.Suryanarayana Chief General Manager, Hyderabad Metropolitan Water Supply and Sewerage Board (HMWSSB)	Strength and Durability studies on concrete composites with admixtures like micro silica and fly ash	Awarded
12		Mr. S Venkateswara Rao NIT,Warangal,	Experimental studies on the effect of size of aggregate and fines on the strength and durability properties of self-compacting concrete	Awarded
13		Mrs.M.Swarupa Rani, CBIT,Hyderabad	Behaviour of self-compacting concrete made with GGBS and RHA under axial compression and flexure	Awarded
14	Dr. M.V. Seshagiri Rao	Mr. Mettu Bhaskara Rao, Hyderabad	Behaviour of concrete beams Reinforced with Glass fibre reinforced polymer bars and flats under shear	Awarded
15		Mrs. Lavanya Prabha, Chennai	Studies on RPC-An ultra-high strength concrete	Awarded
16		Mr. M.Chandrasekhar Hyderabad	Behaviour of Fibre Reinforced Self Compacting Concrete and its application as wall panels	Awarded
17		Mr. G. S. Sudhir kumar, Tumkur	An experimental investigation on slurry infiltrated fibrous cement	Awarded
18		Mr. M.V.Venkateswar Rao Consulting engineer, SECON	The performance of R.C slabs Reinforced with GFRP bars	Awarded
19		Mr. K.SuvarnaLatha Head, Kamala Nehru Polytechnic, Hyderabad	Strength and Durability studies on concrete made with partial replacement of cement and sand with Flyash, GGBS and GBFS	Awarded
20		Mr. V.Srinivasa Reddy, Associate Professor GRIET, Hyderabad	Studies on the properties of self- healing concrete based on microbial induced calcite precipitation by Bacillus Subtilis JC3	Awarded

S. No	Name of the Supervisor	Particulars of Ph.D. Scholars	Research Topic	Status
21		Mr. V.Mallikarjna Reddy, Associate Professor, GRIET, Hyderabad	Effect of Elevated Temperatures on High Strength Self Compacting Concrete	Awarded
22		Mr. G V V Satyanarayana GRIET, Hyderabad	Mechanical Response of Slab Elements with Mineral Admixtures Under Different Edge Conditions Subjected to Flexure, Punching Shear and Impact	Awarded
23	Dr. M.V. Seshagiri Rao	Mr. S.Srihari, Prof &Head, JBIT Hyderabad	Studies on Self Compacting Concrete Made with Granulated Blast Furnace Slag as Fine Aggregate in Combination With Different Mineral Admixtures	Pursuing
24		Ms. P. Srilakshmi, Assoc. Professor in Civil Engg., JNTUCEH College of Engg. Hyderabad	Stress Strain Behaviour Of SCC in Confined and Unconfined States	Pursuing
25		Mr. N. Ramanjaneyulu, Assistant Professor CVR College of Engineering, Hyderabad	A Study On effect of Light Weight Coarse Aggregate and M-Sand using Standard Grade and Higher- Grade Self Compacting Concrete	Pursuing
1		Mr. Masiuddin Siddiqui Asst. Professor of Civil Engineering, MJCET, Hyderabad	Energy based pushover analysis of irregular RCC buildings	Pursuing
2	Dr. N. Murali Krishna	Mr. R. Prashanth Assoc. Professor of Civil Engineering, MVSR College of Engg. Hyderabad	Optimal Structural Design of Helix Fiber-reinforced Concrete Structures using GA's	Pursuing
3		Mr. P. Anuradha Asst. Professor of Civil Engineering, O.U.College of Engg. Hyderabad	Non-linear Analysis of Infill Frames using Finite Element Approach	Pursuing
4		Mr. V. A. Padmanabha Rao EE, R&B, Khammam	Utility of TMD's in the Structural Design of Cable Stayed Bridges	Pursuing

# PROGRAM EDUCATIONAL OBJECTIVES (PEOS)

Program Educational Objectives are broad statements that describe the career and professional accomplishments that the program is preparing students to achieve.

**PEO-I**: To prepare students to excel in undergraduate and graduate programs and to succeed as a successful Civil Engineer to take up professional challenges through rigorous training during the program.



**PEO-II**: To provide the students with a sound foundation in mathematical, scientific and engineering fundamentals required to solve engineering challenges during their work as a professional.

**PEO-III**: To train students with good scientific and engineering breadth and depth so as to comprehend, analyze, design and pursue innovative projects for real time application to the society.

**PEO-IV**: To inculcate in students the professional and ethical attitudes, effective communication skills, team work skills, a multidisciplinary approach and an ability to relate engineering issues to a broader social context.

**PEO-V**: To groom the students with excellent leadership, moral values and the lifelong learning needed for a successful professional career.

### **PROGRAM OUTCOMES (PO)**



#### **ENGINEERING GRADUATES WILL BE ABLE TO**

- **1. Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex engineering problems.
- 2. Problem analysis: Identify, formulate, review research literature and analyze complex engineering problems reaching substantiated

conclusions using first principles of mathematics, natural sciences and engineering sciences.



- **3. Design/development of solutions**: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal and environmental considerations.
- **4. Conduct investigations of complex problems**: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- **5. Modern tool usage**: Create, select and apply appropriate techniques, resources and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

- **6. The engineer and society**: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- **7. Environment and sustainability**: Understand the impact of the professional engineering solutions in societal and environmental contexts and demonstrate the knowledge and need for sustainable development.
- **8. Ethics**: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **9. Individual and team work**: Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary settings.
- **10. Communication**: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- **11. Project management and Finance**: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- **12. Life-long learning**: Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

# PROGRAM SPECIFIC OUTCOMES (PSOS)



After the completion of four years B. Tech Programme, the students will be able to

- **PSO-1**: Design and execute any complex Civil Engineering Project.
- **PSO-2**: Acquire necessary skills to carry out time, financial and resource management for any Civil Engineering Project.
- **PSO-3**: Prove worthy in higher education.
- **PSO-4**: Develop leadership qualities to undertake multi-disciplinary projects.





Name of the course	Course Outcomes
	I B.Tech. I Semester
	CO1: Understand Model and solve linear differential equations
Mathematics-I	CO2: Solve problems on function optimization with and without constraints
	CO3: Apply the knowledge of multiple integrals in solving problems in vector fields
	CO1: Important properties (physical, chemical, optical, electrical etc.) are connected to structure of the crystal Condition for diffraction to take place and the advantages of different methods. They will get an idea about the tailoring of materials by controlling the defects
	CO2: Non-destructive testing is a very useful tool for testing materials for defects and the students are exposed to important techniques like UFD's, Radiography etc.
Engineering physics	CO3: A broad picture about optics and semiconductor devices helps them gain understanding of the basic principles involved
	CO4: Students will understand the important mechanism underlying in the memory devices and the relation between theoretically important quantities and experimentation calculated
	CO5: To develop an understanding the concepts involved in synthesis and characterization of nanomaterials which is a frontier area in materials science today. This would enable the engineer to judiciously choose a material for a specific application
	CO1: Would get an understanding of the importance of different types of portable energy sources like batteries and their limitations
Engineering Chemistry	CO2: Would understand the effect of corrosion and its inevitable consequences on metals which would help him take precautions to protect from corrosion
,	CO3: Would be able to handle real time situations involving energy sources water, eco-friendly materials
	CO4: Would develop ability to handle situations involving problems associated with chemical substances in engineering situations
	CO1: Demonstrate the data representation and data manipulation through well-defined operators
	CO2: Discern the significance of operator precedence and associative properties
	CO3: Incorporate the pre-processor directives, conditional compilation statements and define macros in the program
	CO4: Appreciate the type system implanted in the C programming language
	CO5: Choose appropriate control structure to represent the iterations based on initial conditions
Problem solving	CO6: Represent a collection of homogeneous data items through arrays
through C	CO7: Solve the memory access problems through pointers
	CO8: Realise the dynamic memory allocation using pointers which is essential in effective utilisation of memory
	CO9: Demonstrate the logical view of memory using pointers to access arrays, strings and functions and exercise user defined functions
	CO10: Implement the code reusability with the help of user defined functions and pointers
	CO11: Appreciate the advantages of modular programming through functions and possible recursions
	CO1: To understand the theory of projection
	CO2: To know and understand the conventions and the methods of Engineering drawing
Engineering Drawing	CO3: To improve the their visualisation skills so that they can apply these skills in understanding the industrial drawings
	CO4: To prepare simple drawings
English Language and	CO1: Emerge as good speakers and listeners
English Language and Communication Skills	CO2: Develop critical and analytical thinking
Lab I	CO3: Write effectively
	CO4: Deliver effective presentation skills using the multimedia tools
Physics Lab	CO1: Get an understanding of errors and their role in physical measurements

Name of the course	Course Outcomes	
Name of the course	CO2: Would develop skills in handling various kinds of laboratory instruments	
	CO3: Get awareness of magnitudes of the physical quantities involved	
	CO4: Get an understanding of the physical concepts involved. They learn how to present the	
	observations and results at the end of the experiment	
	CO1: Students get enabled to deepen and strengthen the level of understanding of various principles	
Engineering Chemistry	involved in experimental techniques involved in engineering chemistry	
Lab	CO2: Students get hands on experience with the different instruments and develop experimental skills	
	CO3: Students develop analytical skills and learn how to analyse and present results of an experiment	
	CO1: Discern the external data representation (byte ordering) followed in Intel processors and effectively	
	utilises the bit wise operators and format specification feature of C	
	CO2: Appreciate the type system implanted in the C programming language	
	CO3: Demonstrate the logical view of the memory using pointers to access arrays and strings	
	CO4: Select appropriate control structure to represent the repetitive actions, based on initial conditions	
Computer Programming	CO5: Effectively implement store-reuse principle in programming models	
Lab	CO6: Effectively resolve the scope and life time of variables in modularised programs and selects an	
	appropriate storage class in order to realise a design principle	
_	CO7: Demonstrate the parameter passing aspects to user defined functions	
	CO8: Develop programs using command line arguments	
	CO9: Develop robust and resilient code through proper error handling mechanisms	
	CO10: Fix the run time errors present in the code, using well behaved testing tools like gdb and	
	developing of proper test stubs	
-	CO1: To identify the peripherals of PC, assemble and disassemble PC components	
IT Workshop Lab	CO2: To install the system software MS Windows, Linux and required device drivers	
-	CO3: To work with productivity tools for Word processing, Spread sheet and Presentations CO4: To design basic web pages	
	CO1: Acquire skills of basic engineering trades like Carpentry Tinsmithy etc	
-	CO2: Demonstrate an understanding of and comply with workshop safety regulations	
Engineering Workshop	CO3: Identify and use marking out tools, hand tools, measuring equipment and to work to prescribed	
	tolerances	
	CO4: Apply the knowledge of the above trades in their day to day activities	
I B.Tech. II Semester		
	CO1: To apply the concepts of matrix rank to analyse linear systems	
Mathematica II	CO2: Compute Eigen values and Eigen vectors for engineering applications	
Mathematics II	CO3: Develop the skill of evaluating Laplace and Inverse Laplace transform to solve linear systems	
	under initial and boundary conditions	
	CO1: Develop the skill of determining approximate solutions to problems having no analytical solutions	
Computational	in different contexts	
Mathematics	CO2: Solve problems related to cubic spline fitting and approximation of functions using least squares	
	CO3: Develop the skill of finding approximate solutions to problems arising in linear differential equations	
	CO1: Represent the real-world data objects through arrays and structures	
_	CO2: Handle self-referential structures	
	CO3: Give persistence to data either in a record form or in a text form and be able to manipulate the same	
-	CO4: Handle mechanisms that are essential for understanding the concepts in database management	
Data Structures through	systems	
C	CO5: Represent Abstract data types in array and linked forms and implement various data structures like	
	stacks, queues	
	CO6: Culture the generic representation of data types using void pointer feature of C and developing the	
	ADTs	
	CO7: Understand, implement and profile different sorting techniques	

Name of the course	Course Outcomes
	CO1: To understand the system of forces and their effects of engineering structures
Applied Engineering	CO2: To calculate sectional properties which will be an important deciding design parameter in the
Mechanics	engineering design
	CO3: To apply the concepts of friction in the design/analysis of various mechanical systems
	CO1: Evolve as effective communicators
	CO2: Emerge as decision makers
English Language and	CO3: Develop critical and analytical skills
Communication Skills	CO4: Gather ideas and information and organise them coherently
Lab II	CO5: Develop leadership and team building skills
	CO6: Emerge as autonomous learners
	CO7: Develop narrative skills
Computational	CO1: Represent real world data in a program
Mechanics Lab	CO2: Implement various Numerical Methods related to solving the real world problems
	CO3: Analyse the complexity of various algorithms based on the convergence criterion
	CO1: Exercise upon derived data types including structures and unions to represent the real world data items
	CO2: Represent abstract data types in array and linked forms and implement various data structures like
	stacks, queues
Data Structures through	CO3: Culture the generic representation of data types using void pointer feature of C and developing the ADTs
Data Structures through C Lab	CO4: Understand, implement and profile different sorting techniques like bubble, insertion, quick and
O Lab	merge sort
	CO5: Incorporate the pre-processor directives, conditional compilation statements and defining macros in the program
	CO6: Realise the static linking aspects and develops static libraries using Menu based tools
	CO7: Effectively resolve the scope and life time variables in modularised programs and selects an appropriate storage class for aim order to realise a design principle
	II B.Tech. I Semester
Duahahilitu anal	CO1: Represent the engineering problem as an appropriate statistical model
Probability and Statistics	CO2: To collect and analyze the data in engineering problem using different statistical methods
Statistics	CO3: To draw conclusions after analyzing the data and implementing them in the engineering problem
	CO1: To apply the knowledge of mathematics to identify, formulate and analyze engineering Problems
	CO2: To understand the applications of strain energy concepts
Strength of Materials-I	CO3: To interpret the real-time problems and approximate analytical solutions
	CO4: To design circular shafts and close coiled helical springs with appropriate resisting capacities
	CO5: To calculate the deflections of determinate beams useful in the design checks
	CO1: To use naturally available minerals and rocks in manufacturing process of Construction Materials
	such as Pozzolanic cements, Concrete and Admixtures
	CO2: To identify suitable site for Civil engineering structures like reservoirs and dams.
Engineering Geology	CO3: To apply the relevance of Engineering Geology for successful completion of major Civil Engineering structures
	CO4: To prevent failure of major Civil Engineering structures due to Geological drawbacks and suggest suitable type of tunnels for tunnelling works in Roadways and Railways.
	CO1: To conduct different types of measurements in different types of surveying
	CO2: To locate proper site for bridges, dams, reservoirs, calculation of capacity of a Reservoir, quantity
	of cutting and filling and route map for Roads, Railways, Canals etc. using Plane Table Surveying and
Surveying-I	Contouring
	CO3: To plot profile of the ground by using Auto level
	CO4: To prepare contour maps for different field conditions and compute areas and volume using Simpson's and Trapezoidal rule

Name of the course	Course Outcomes
1141110 01 1110 00 1110	CO1: To understand and analyse the fluid properties and measurements of flows using different
	instruments
Fluid Mechanics	CO2: To acquire elementary knowledge of effect of forces on fluids and submerged bodies.
	CO3: Understand the application of principle of conservation of energy
	CO4: To design pipes for carrying fluids and to understand the effect of hydraulic hammer
	CO1: To have knowledge on naturally available building materials keeping in view strength, safety,
	durability, weathering, climatic and economic aspects.
Building Materials & Construction	CO2: To understand the different building services like plumbing, ventilation, air conditioning, acoustics and fire protection
Practices	CO3: To understand the requirement and design of form work
	CO4: To understand building bye-laws, norms for planning, meeting targets of utility,
	optimizing time of construction.
	CO1: To conduct chain survey
	CO2: To find distance between two points by using compass
Surveying Lab	CO3: To use plane table for plotting an area in the field
	CO4: To conduct fly levelling and differential levelling
	CO5: To prepare contour maps.
	CO1: To identify physical properties of different types of minerals and their characteristics
Caalagulah	CO2: To identify different types of rocks and their characteristics
Geology Lab	CO3: To interpret and draw sections for geological maps
	CO4: To solve structural geology problems
	CO1: Students are introduced to concepts of Statement-Argument, Assumption and Course of Action.
	Students learn to use reasoning as a tool to match statements with arguments etc.
	CO2: Students are trained to look at data and find links and patterns. It teaches them to link data with
Data Interpretation Lab	conclusions. It enhances their ability to study data logically.
	CO3: Students are trained to study problem situations and use reasoning as a tool to find solutions. This
	nurtures the ability to use reasoning as a skill to find solutions to real time problem solving.
	CO4: To analyze and infer the data with respect to trend and case based.  II B.Tech. II Semester
	CO1: To develop awareness about the hazards to environment
	CO2: To develop awareness about the nazards to environment  CO2: To develop awareness about optimum utilization of natural resources
Environmental Studies	CO3: To learn about GREEN TECHNOLOGIES to maintain sustainable development
	CO4: To get awareness about rules and regulations applicable for pollution control
	CO1: Identify basic circuit components and solve basic problems using Ohms law, Mesh and Nodal
	analysis. Solve the problems on series and parallel combinations, understand the construction.
Electrical Technology	CO2: Understand the Construction and working principle of single phase transformer and calculate the
	efficiency and regulation of transformer by OC and SC Test.
	CO3: Understand the construction and working of three phase induction motor and alternator.
	CO1: To identify different tunnelling equipment and boring machines.
	CO2: To distinguish between different Piles Driving Machinery and Earth Work Machinery.
Construction Machinery	CO3: To identify different Compaction Machinery.
Contained in Machinery	CO4: To identify different Hoisting Equipment & Conveying Equipment.
	CO5: To use appropriate construction machinery for a specific purpose in the construction of any
	engineering structure
	CO1: To calculate the mechanical properties of cement and aggregates.
	CO2: To measure the workability and the mechanical properties of concrete.
Concrete Technology	CO3: To conduct different strength tests on concrete and non-destructive tests on concrete.
	CO4: To design a desired grade of concrete with and without admixtures with good understanding
	about the effect of creep, shrinkage and elastic deformation on the durability of concrete
	CO5: Use special concrete depending on the requirement

C01: To analyze the variation of stresses in thick cylinders and thin cylinders C02: To analyze, design and assess the failure behaviour of structural members. C04: To analyze the arches and determinate pin jointed plane frames and determine the deflections of structural members. C04: To analyze the arches and determinate pin jointed plane frames and determine the deflections of frames.  C05: To analyze the structures (Highway bridges, Railway bridges etc.) subjected to moving loads. C01: To measure horizontal and vertical angles and to run traverse using theodolite. C02: To measure the distance and reduced Levels between different objects using trigonometric C03: To set out different types of horizontal and vertical curves and also to set out works C04: To work with Total station and Electronic Theodolite in different field conditions C01: To design the most economical channel section. C02: To analyze the relationship between the model and prototype of hydraulic structures. C03: To calculate efficiencies of different types of turbines and centrifugal pumps. C04: To understand the principles lying in establishing hydropower plants C05: Calculate efficiencies of different types of turbines and centrifugal pumps. C04: To determine area using Total station C05: To conduct traversing, contouring, setting out works, distance, gradient between two points using Total Station C05: To indient area using Total station C06: To use Electric Resistance Strain Gauges for various applications. C06: To determine the Impact strength of steel bars. C06: To determine the Impact strength of different metal specimens. C06: To determine the Impact strength of different metal specimens. C06: To use Electric Resistance Strain Gauges for various applications. C07: Students will develop familiarity with Corporate English C08: Students will beven from the principle strength of different metal specimens. C08: Students will beven from the principle strength of different metal specimens. C09: Students will beven from the principle strength	Name of the course	Course Outcomes
CO2: To analyze, design and assess the failure behaviour of structural members.		CO1: To analyse the variation of stresses in thick cylinders and thin cylinders
CO4: To analyze the arches and determinate pin jointed plane frames and determine the deflections of frames.   CO5: To analyze the structures (Highway bridges, Railway bridges etc.) subjected to moving loads.		
Surveying - II  Hydraulics and Hydraulic Machines  Surveying Lab - II  Sur	Strength of Materials -	CO3: To determine the deflections of structural members.
Surveying - II  CO1: To measure horizontal and vertical angles and to run traverse using theodolite.  CO2: To measure the distance and reduced Levels between different objects using trigonometric co3: To set out different types of horizontal and vertical curves and also to set out works co4: To work with Total station and Electronic Theodolite in different field conditions  CO1: To design the most economical channel section.  CO2: To analyze the relationship between the model and prototype of hydraulic structures.  CO3: To calculate efficiencies of different types of turbines and centrifugal pumps.  CO4: To understand the principles lying in establishing hydropower plants  CO5: Calculate efficiencies of different types of turbines and centrifugal pumps  CO1: To use Theodolite for measuring horizontal and vertical angles  CO2: To conduct traopnometric levelling for finding heights and distances  CO3: To conduct traopnometric levelling for finding heights and distances  CO3: To conduct traoversing, contouring, setting out works, distance, gradient between two points using Total Station  CO5: To conduct traversing, contouring, setting out works, distance, gradient between two points using Total Station  CO1: To find deflection and Young's modulus of a Cantilever beam, simply supported beam etc.  CO2: To determine the Torsional strength of steel bars.  CO3: To determine the Hardness of different metal specimens.  CO4: To ind Stiffness of different metal specimens.  CO5: To determine the Impact strength of different metal specimens.  CO6: To use Electric Resistance Strain Gauges for various applications.  CO1: Students will bave enriched vocabulary  CO3: Students will have enriched vocabulary  CO3: Students will be proficient in answering reasoning based questions  III B.Tech. I Semester  CO1: Capable of analyzing fundamentals of economics such as demand, Production, price, supply concepts etc., which helps in effective business. Administration  CO2: Analyze economics of scale and the Break-Even Point  CO3: Able to	II	
Surveying - II  CO2: To measure the distance and reduced Levels between different objects using trigonometric CO3: To set out different types of horizontal and vertical curves and also to set out works CO4: To work with Total station and Electronic Theodolite in different field conditions CO2: To analyze the relationship between the model and prototype of hydraulic structures, CO3: To calculate efficiencies of different types of turbines and centrifugal pumps. CO4: To understand the principles lying in establishing hydropower plants CO5: Calculate efficiencies of different types of turbines and centrifugal pumps. CO1: To use Theodolite for measuring horizontal and vertical angles CO2: To conduct trigonometric levelling for finding heights and distances CO3: To conduct trachometric surveying CO4: To determine area using Total station CO5: To conduct traversing, contouring, setting out works, distance, gradient between two points using Total Station CO1: To find deflection and Young's modulus of a Cantilever beam, simply supported beam etc. CO2: To determine the Torsional strength of steel bars. CO3: To determine the Hardness of different metal specimens. CO4: To find Stiffness of different metal specimens. CO5: To determine the Hardness of different metal specimens. CO6: To use Electric Resistance Strain Gauges for various applications. CO1: Students will develop familiarity with Corporate English CO2: Students will develop familiarity with Corporate English CO3: Students will develop familiarity with Corporate English CO4: Students will be proficient in answering reasoning based questions  III B.Tech. I Semester  CO3: Analyze economics of scale and the Break-Even Point CO3: Analyze economics of scale and the Break-Even Point CO3: Analyze economics of scale and the Break-Even Point CO3: Analyze economics of scale and the Break-Even Point		CO5: To analyze the structures (Highway bridges, Railway bridges etc.) subjected to moving loads.
CO3: To set out different types of horizontal and vertical curves and also to set out works CO4: To work with Total station and Electronic Theodolite in different field conditions  CO5: To design the most economical channel section.  CO2: To analyze the relationship between the model and prototype of hydraulic structures. CO3: To calculate efficiencies of different types of turbines and centrifugal pumps. CO4: To understand the principles lying in establishing hydropower plants CO5: Calculate efficiencies of different types of turbines and centrifugal pumps  CO1: To use Theodolite for measuring horizontal and vertical angles CO2: To conduct trigonometric levelling for finding heights and distances CO3: To conduct tachometric surveying CO4: To determine area using Total station CO5: To conduct traversing, contouring, setting out works, distance, gradient between two points using Total Station  CO1: To find deflection and Young's modulus of a Cantilever beam, simply supported beam etc. CO2: To determine the Torsional strength of steel bars.  Strength of Materials Lab  CO3: To determine the Hardness of different metal specimens. CO4: To find Stiffness of different metal specimens. CO5: To determine the Impact strength of different metal specimens. CO6: To use Electric Resistance Strain Gauges for various applications. CO6: To use Electric Resistance Strain Gauges for various applications. CO7: Students will develop familiarity with Corporate English CO2: Students will be proficient in answering reasoning based questions  III B. Tech. I Semester  CO1: Capable of analyzing fundamentals of economics such as demand, Production, price, supply concepts etc., which helps in effective business Administration CO2: Analyze economies of scale and the Break-Even Point CO3: Able to determine the Price-Output Relationship in different market Structures		CO1: To measure horizontal and vertical angles and to run traverse using theodolite.
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Managerial Economics  CO 3: Able to determine the Price-Output Relationship in different market Structures		
Wallage liai Ecolomics		
	Managerial Economics	
business activity	and Financial Analysis	business activity
CO 5: Analyze accounting statements like income & expenditure statement, balance sheet to		
understand financial performance of the business and to initiate the appropriate decisions to run the		
business profitably  CO 1: Compute the static indeterminacy, kinematic indeterminacy and also the deflection of		
indeterminate structures.		
CO 2: Determine redundant forces and joint rotations of the indeterminate beams.		
Structural Analysis CO 3: Evaluate the joint displacements of the indeterminate beams and rigid frames.	Structural Analysis	
CO 4: Calculate the redundant forces of the indeterminate beams and frames.		
CO 5: Determine the joint displacements of the indeterminate beams and frames.		
CO 6: Analyze the given forces acting on structures using a suitable analytical method.		,

Name of the course	Course Outcomes		
	CO1: Use the limit state design concepts for the design of reinforced concrete structures		
	CO2: Demonstrate the reinforcement details for beams of different cross sections		
Deinforced Concrete	CO3: Elucidate the reinforcement details for reinforced concrete slabs		
Reinforced Concrete Structures	CO4: Demonstrate the reinforcement details of compression members		
Structures	CO5: Explicate the serviceability requirements of reinforced concrete elements and also design of staircase.		
	CO 6: Design the given reinforced concrete building elements.		
	CO 1: Determine the index properties of soils and also to classify the soils based on the classification test results.		
	CO 2: Study the behaviour of soils under permeable and impermeable conditions.		
Soil Mechanics	CO 3: Compute the vertical stresses in soils when subjected to the external loading.		
	CO 4: Study the behaviour of the soil due to compaction and consolidation which is useful in the prediction of stability of structures.		
	CO 5: Usefulness of the shear strength parameters of soils under different drainage conditions.		
	CO 6: Suggest a suitable soil for the construction with a good shear strength and bearing capacity.		
	CO 1: Estimate the rainfall over a catchment area.		
	CO 2: Evaluate the role of evaporation, infiltration and runoff on hydrographs.		
Water Resources	CO 3: Asses different aquifer parameters influencing the groundwater occurrence.		
Engineering - I	CO 4: Design a suitable method of irrigation that suits for preserving the soil nutrients.		
	CO5: Design a suitable irrigation canal with an appropriate canal lining		
	CO6: Ascertain the efficiency of a catchment area.		
	CO 1: Ability to calibrate venturimeter, orifice meter & notches		
	CO 2: Ability to find coefficient of discharge for small orifice by different methods		
Hydraulics & Hydraulic Machines Lab	CO 3: Ability to find impact of jet on vanes		
Machines Lab	CO 4: Ability to explain the concept of hydraulic jump		
	CO 5: Ability to conduct performance test on pelton wheel turbine and Francis turbine and efficiency test on centrifugal pumps		
	CO 1: Determine the index properties and Atterberg limits of cohesive soil.		
	CO 2: Compute the field density of soil samples.		
Soil Mechanics Lab	CO 3 Evaluate the permeability behaviour of the soil.		
	CO 4: Assess the effect of compaction and consolidation.		
	CO 5: Calculate the shear strength parameters of soil.		
Effective Technical	CO1: Attain proficiency in technical writing CO2: Use English language appropriately to write effective reports, notes and summaries.		
Effective Technical Communication Lab	CO2: Ose English language appropriately to white effective reports, notes and summanes.  CO3: Write emails suitable for professional communication		
Communication Lab	CO3: Write emails suitable for professional communication  CO4: Develop analytical and critical thinking skills		
	III B.Tech. II Semester		
CO 1: Apply the concepts of plasticity, limit state design and to understand the design of different types of			
	connections.		
0, 10, 1	CO 2: Design the columns and the connection with column bases.		
Steel Structures	CO 3: Design concept of the plate girder.		
	CO 4: Design the components of roof trusses carrying different loads as per IS specifications.		
	CO 5 : Design a strong steel structure satisfying the permissible stresses and deflection criteria		
	CO 1: Suggest a suitable method for soil exploration		
	CO 2: Use an appropriate analysis to have a stable earthen embankment		
Foundation Engineering	CO 3: Recommend a suitable earth pressure for designing an earth retaining structure		
	CO 4: Design & Suggest a suitable foundation for different soil conditions		
	CO 5: Estimate different parameters involved in the design of well foundations		

Name of the course	Course Outcomes
	CO 1: Accomplish Engineering surveys and prepare a good highway alignment.
	CO 2: Design the Cross section and alignment for different roads and National highways.
Transportation	CO 3: Study the traffic design and parking characteristics to assure traffic safety.
Engineering	CO 4: Comprehend the importance of road markings & design of traffic signalling system for a suitable
	intersection design and rotary design
	CO 5: Understand the importance and suitability of railway engineering & its geometrical design.
	CO 1: Design and detailing the Retaining walls.
A diverse and Ohmortonal	CO 2: Design a suitable capacity water tank that suits real time application.
Advanced Structural	CO 3: Design the flat and waffle slabs as per IS specifications.
Analysis	CO 4: Design the deep beams with high moment carrying capacity.
	CO 5: Design steel gantry girders for an industrial shed.
	CO 1: Ascertain the air pollutants and effects of pollutants.
	CO 2: Suggest a suitable method for the removal of a particular pollutant.
Air pollution and	CO 3: Maintain ambient air quality.
Control	CO 4: Suggest a suitable plume model.
	CO 5: Recommend an appropriate measure in the plant and can monitor and suggest suitable method
	for air quality management
	CO 1: Accomplish different form work activities.
	CO 2: Suggest a suitable shoring technique and fire resisting technique.
Construction	CO3: Practice prefabrication and pre-stressing techniques
Techniques & Practices	CO4: Propose an appropriate jacking technique tunnelling technique and piling technique
	CO 5: Evaluate the quality of the materials and construction and prepare tender documents,
	PERT, CPM Charts, estimate the quantities.
	CO 1: Develop Project ideas for an effective planning and appraisal of infrastructure projects.
Infrastructure	CO 2: Plan activities in line with procurement, scheduling and management efficiently.  CO 3: Proficiently estimate and account for public works.
Engineering	CO 3. Proficiently estimate and account for public works.  CO 4: Organize work flow considering both time and money.
	CO 5: Analyze and complete the given project effectively without any risk factors.
	CO 1: Propose the health monitoring requirements depending on the age of structures.
Health Monitoring and	CO 2: Use appropriate sensor and health monitoring system.
Retrofitting of	CO 3: Evaluate a suitable strengthening technique for retrofitting.
Structures	CO 4: Use IT concepts for health monitoring of structures such as multi-storied building & bridges etc.
	CO 5: Suggest an appropriate seismic retrofitting technique for the structures.
	CO 1: Design various structures for the requirements of the society as per IS codes.
	CO 2: Summarize the detailing of various structural elements.
Computer Aided	CO 3: To draw Structural detailing of other RCC elements and steel sections.
Structural Drafting Lab	CO 4: Detail the RC foundations and steel foundations.
	CO 5: Develop the detailing for RC staircase.
	CO 1: Evolve as effective communicators
	CO 2: Emerge as decision makers, time managers and good negotiators
	CO 3: Develop holistic soft skills
Advanced English	CO 4: Develop critical and analytical skills
Communication & Soft	CO 5: Present their skills confidently in the job market
Skills Lab	CO 6: Gather ideas and information and organise them relevantly and coherently.
	CO 7: Develop leadership and team building skills.
	CO 1: Solve the problems using arithmetic, mensuration, geometry, averages& clocks& calendars
Quantitative Ability Lab	questions
	Co 2: Practice general problems in placement, CAT and GRE etc. tests

Name of the course	Course Outcomes							
Name of the course	IV B.Tech. I Semester							
Retrofitting and CO1: Ability to understand causes for distress & preventive measures against distress in structures								
Rehabilitation of Structures	CO2: Ability to use appropriate materials and techniques for rehabilitation & retrofitting of structures							
	CO3: Ability to use different methods for damage assessment of structures							
	CO4: Ability to use sensors & instrumentation for the health monitoring of important structures							
	CO1: Ability to apply remote sensing techniques in obtaining Geographic information of a given							
	catchment							
Remote Sensing and GIS	CO2: Ability to use the knowledge of Geospatial data & attribute data management in infrastructural development							
	CO3: Ability to prepare topological maps of land use and land cover							
	CO4: Ability to do digitization of topological maps using the field data and existing data							
	CO1: Ability to estimate total cost of a project							
Fatination 0 Ocation	CO2: Ability to become a good-valuer of buildings and other structures							
Estimation & Costing	CO3: Ability to prepare tenders and tender documents							
	CO4: Ability to prepare bar bending schedules, work orders & project activity schedules							
	CO1: Ability to gain knowledge of creating and starting a venture							
	CO2: Ability to prepare business plan							
Entrepreneurship	CO3: Ability to gain knowledge of venture capital financing							
·	CO4: Ability to gain knowledge of institutional support to entrepreneurs							
	CO5: Ability to gain knowledge of documentation for starting business							
	CO1: Ability to understand the use of appropriate materials in different road layers							
Pavement Analysis and	CO2: Ability to evaluate quality & performance of bound and unbound road materials							
design	CO3: Ability to analyze and design flexible and rigid pavements							
	CO4: Ability to construct different types of pavements							
	CO1: Ability to understand necessity of pre-stress introduction in concrete structures							
Prestressed concrete	CO2: Ability to use appropriate materials for pre-stressing of concrete structures							
structures	CO3: Ability to use relevant IS Codes to design pre-stressing concrete structures							
Structures	CO4: Ability to understand the strength and serviceability design requirements of pre-stressed concrete structures							
	CO1: Ability to determine the physical and mechanical properties of aggregate							
Concrete and Highway	CO2: Ability to determine the index properties of bitumen							
Materials Lab	CO3: Ability to determine the physical and mechanical properties of cement							
	CO4: Ability to determine the mechanical properties of concrete							
	CO1: Ability to perform qualitative analysis of a given water sample							
	CO2: Ability to find presence of chlorides, total solids, iron, dissolved oxygen, nitrogen and total							
Environmental	phosphorus in a given water sample							
Engineering Lab	CO3: Ability to find BOD and COD in wastewater samples							
	CO4: Ability to determine the optimum coagulant dose for removal of colloidal particles in water							
	CO5: Ability to determine chlorine demand in water for disinfection							
	CO1: Ability to collect ideas through literature survey about new innovations, analyze and interpret into							
Industry Oriented Mini Project	new solutions.							
	CO2: Ability to make themselves aware of the industry perspective and new industry trends.							
	CO3: Ability to develop writing skills by submitting a technical report							
IV B.Tech. II Semester								
	CO1: Ability to prepare planning, scheduling & construction methodology							
Construction Planning	CO2: Ability to control quality control and safety							
Technology and	CO3: Ability to prepare checklist of tender documentation							
Management	CO4: Ability to prepare financial closures, resource levelling							
	CO5: Ability to participate in business development activities							

Name of the course	Course Outcomes
Green Building Concepts	CO1: Graduates will be able to get knowledge on Green Buildings and its related technologies and Awareness in understanding the importance of climate, climatic changes and its influence
	CO2: Graduates will be able to elaborate building materials choice and adoption of alternative materials in construction
	CO3: Students will be able to recognize the components of urban ecosystem solar radiation, Air movements on the earth and land use and awareness on environmental impacts and ecological balance
	CO4: To design building resources (passive energy, building components materials etc.) and ability to plan, schedule and monitor building infrastructure
	CO1: To understand the concepts of planning and designing of airports
	CO2: To understand the significance of airports in nations economy
Airport Planning and Design	CO3: To understand the concepts of airport capacity runway capacity airport configuration runway configuration taxiway configuration
	CO4: To understand the different factors which affect the planning and design aspects of an airport
	CO5: To understand the different obstructions of airport functioning
	CO1: To learn about management concepts
	CO2: To acquire confidence in planning, organizing, directing and controlling an organization
Management Science	CO3: To understand different elements in an organizational structure
	CO4: To develop concepts in quality control technique and in marketing, financing, human resource and production departments of an organization
	CO 1: Graduates will be able to present on the design and fabrication of imparted knowledge in different aspects of a domain.
	CO 2: Graduates will be able to present to the audience on the methods of solving.
Seminar	CO 3: Graduates will be able to build confidence and develop presentation skills and improve communication skills.
	CO4: Graduates will be able to sharpen their personality, intelligence and make themselves aware of knowledge about new hardware and software needs of market.
	CO 1: Graduates shall be able to communicate the technical aspects of the subjects they have studied in the four years of B.Tech. Programme.
Comprehensive Viva	CO 2: Graduates will be able to express their depth of knowledge by understanding the current problems and/or new insights at the forefront of those subjects.
	CO 3: Graduates will be able to convince the command on the subject systematically.
	CO 1: Graduates will be able to explain the aim, objective and utility of the complex problem to the selected audience.
Project Work	CO 2: Graduates will be able to develop software Project management skills, Problem solving skills and System integration skills
	CO 3: Graduates will be able to work in a team to solve real-life problems and maintain professionalism.

# B.Tech. III year - I semester (CBCS: 2017-18) Open Elective-1

S.N	Subject	Dept.	Cubina	Periods per Week		Credits	Scheme of Examination Maximum Marks			
0.	Code		Subject	L	T/P/D	Credits	Int.	Ext.	Total	
1	31305	CE	Photogrammetry & Remote Sensing	3	0	3	30	70	100	
2	31306	CE	Smart Materials & Smart Structures	3	0	3	30	70	100	
3	35305	CSE	Fundamentals of Object Oriented Programming Using lava	3	0	3	30	70	100	
4	35306	CSE	Fundamentals of Operating Systems and Shell Programming	3	0	3	30	70	100	
5	34307	ECE	Consumer Electronics	3	0	3	30	70	100	
6	34308	ECE	Communication Systems	3	0	3	30	70	100	
7	32304	EEE	Electrical Safety	3	0	3	30	70	100	
8	32305	EEE	Electric & Hybrid Vehicles	3	0	3	30	70	100	
9	36303	EIE	Elements of Reliability Engineering	3	0	3	30	70	100	
10	36304	EIE	Basics of Sensors and Technology	3	0	3	30	70	100	
11	37302	IT	Basics of Data Base Management Systems	3	0	3	30	70	100	
12	37303	IT	Basics of <i>Data</i> Analytics	3	0	3	30	70	100	
13	33305	ME	Basics of Automobile Engineering	3	0	3	30	70	100	
14	33306	ME	Engineering Materials	3	0	3	30	70	100	
15	38302	H&S	Basics of Human Anatomy & Physiology	3	0	3	30	70	100	
16	38303	H&S	Forensic Engineering	3	0	3	30	70	100	
17	38304	H&S	Entrepreneurship	3	0	3	30	70	100	
18	38305	H&S	Professional Ethics and Corporate Social Responsibility	3	0	3	30	70	100	

**Note**: Students cannot opt for an Open Elective subject offered by their own / parent department. Open Electives offered by CSE & IT cannot be opted by students of CSE & IT

### B.Tech. III year - II semester (CBCS: 2017-18) Open Elective-2

S.N o	Subject Code	Dept.	Subject	Periods per Week		C 191	Scheme of Examination Maximum Marks			
				L	T/P/D	Credits	Int.	Ext.	Total	
1	31362	CE	Green Building Technology	3	0	3	30	70	100	
2	31363	CE	Geographical Information System	3	0	3	30	70	100	
3	35356	CSE	Fundamentals of Computer Networks	3	0	3	30	70	100	
4	35357	CSE	Fundamentals of Web Programming	3	0	3	30	70	100	
5	34361	ECE	Digital Design	3	0	3	30	70	100	
6	34362	ECE	Fundamentals of Wireless Communications	3	0	3	30	70	100	
7	32358	EEE	Industrial Electronics	3	0	3	30	70	100	
8	32359	EEE	Electrical Engineering Materials	3	0	3	30	70	100	
9	36359	EIE	Fundamentals of Technology Management	3	0	3	30	70	100	
10	36360	EIE	Fundamentals of Bio Medical Applications	3	0	3	30	70	100	
11	37357	IT	R-Programming	3	0	3	30	70	100	
12	37358	IT	Programming Using Phython	3	0	3	30	70	100	
13	33357	ME	Fundamentals of Manufacturing Technology	3	0	3	30	70	100	
14	33358	ME	Concepts of Refrigeration & Air Conditioning	3	0	3	30	70	100	
15	38352	H&S	Fundamentals of Human Food and Nutrition	3	0	3	30	70	100	
16	38353	H&S	Intellectual Property Rights	3	0	3	30	70	100	
17	38354	H&S	Appreciation of Contemporary Literature	3	0	3	30	70	100	
18	38355	H&S	Fundamentals of Data Science	3	0	3	30	70	100	

**Note**: Students cannot opt for an Open Elective subject offered by their own / parent department. Open Electives offered by CSE & IT cannot be opted by students of CSE & IT

# B.Tech. IV year II - semester (CBCS: 2018-19) Open Elective-3

S.	Subject	Dept	Cubiast	Periods per Week		Credits	Scheme of Examination Maximum Marks		
No	Code		Subject	L	T/P /D	Credits	Int.	Ext.	Total
1	31452	CE	Disaster Mitigation & Management	3	0	3	30	70	100
2	31453	CE	Safety Engineering	3	0	3	0	70	100
3	35451	CSE	Fundamentals of Mobile Computing	3	0	3	30	70	100
4	35452	CSE	Web Programming Models through NIP	3	0	3	30	70	100
5	34455	ECE	Applications of Microcontrollers	3	0	3	30	70	100
6	34456	ECE	Matlab for Engineers	3	0	3	30	70	100
7	32454	EEE	Non Conventional Sources of Energy	3	0	3	30	70	100
8	32455	EEE	Energy Management	3	0	3	30	70	100
9	36452	EIE	Fundamentals of Measurements and Control Systems	3	0	3	30	70	100
10	36453	EIE	Basics of Virtual Instrumentation	3	0	3	30	70	100
11	37451	IT	Basics of IoT	3	0	3	30	70	100
12	37452	IT	Cyber Security	3	0	3	30	70	100
13	33457	ME	Product Design & Development	3	0	3	30	70	100
14	33458	ME	Basics of Power Plant Engineering	3	0	3	30	70	100
15	38452	H&S	Polity & Politics In India	3	0	3	30	70	100
16	38453	H&S	Basic German Language for Engineers	3	0	3	30	70	100
17	38454	H&S	Social Psychology	3	0	3	30	70	100
18	38455	H&S	Operations Research and Statistical Quality Control	3	0	3	30	70	100

# LABORATORIES OF THE DEPARTMENT

**CVR College of Engineering** offers one of the best laboratory facilities to enable the faculty and students to learn and perform high quality research. In addition to education and research, the department has the necessary equipment to perform experiments for the consultancies. The following is the list of well equipped laboratories:

- 1. Strength of materials lab
- 3. Engineering Geology lab
- 5. Fluid Mechanics and Hydraulic Machine lab
- Cement and Concrete lab
- 9. Computer Aided Drafting lab
- 11. Advanced Concrete Technology

- 2. Survey lab
- 4. Geotechnical Engineering lab
- 6. Highway Materials Testing lab
- 8. Environmental Engineering lab
- 10. Structural Engineering lab
- 12. Centre for Advanced Structural Engineering (Research Lab)

### Strength of Materials Laboratory (Equipment Cost Rs. 12,36,129/-)

#### List of the equipment

- F Universal Testing Machine
- F Torsion Testing Machine
- F Brinell & Rockwell Hardness Testing Machine
- F Deflection of Beams Apparatus

- F Compression Testing Machine
- F Impact Testing Machine
- F Spring Testing Machine



**Universal Testing Machine** 

# Survey Laboratory (Equipment Cost Rs. 22,11,550/-)

### List of the equipment

- Total Stations
- Theodolites
- Tacheometers
- Compasses
- Digital Planimeter
- Global Positioning System (GPS)
- Plane Tables
- Auto Levels
- Optical Squares



**Surveying using Total Station** 



**Compass Surveying** 



**Plane Table Surveying** 

### **Engineering Geology Laboratory (Equipment Cost Rs. 1,85,727/-)**

# List of the equipment

- Minerals
- Rocks
- Geological Models
- Geological Maps



**Geological Models** 



**Rock and Mineral Specimens** 

#### Geotechnical Engineering Laboratory (Equipment Cost Rs. 14,46,387/-)

#### List of the equipment

- Triaxial Shear Apparatus
- **Consolidation Apparatus**
- Standard Penetration Test
- Field Density Apparatus
- Atterberg Limits Apparatus
- Direct Shear Apparatus
- C.B.R. Apparatus
- U.C.C. Apparatus
- Hydrometer Analysis Apparatus
- Sieve Shaker

- **Automatic Compactor**
- Permeability Apparatus
- **Proctor Compaction Apparatus**

- Specific Gravity of Soil
- Ovens





**Triaxial Shear Test Apparatus** 

**Direct Shear Test Apparatus** 

Bernoulli's Apparatus

Orificemeter and Venturimeter

Impact of Jet on Vanes Apparatus

# Fluid Mechanics and Hydraulic Machines Laboratory (Equipment Cost Rs. 17,16,117/-)

#### List of the equipment

- Pelton Turbine
- Reciprocating Pump/ Centrifugal Pump/ Multistage
- Metacentric Height Apparatus
- Pipe Friction Apparatus
- Orifice/ Mouth Piece

- Francis Turbine

  - **Open Channel Flow** 
    - Loss of Head in Pipes Apparatus
- Hydraulic Jump Apparatus
- Rectangular & V-Notch Apparatus Kaplan Turbine





Fluid Mechanics and Hydraulic Machines Laboratory

### Cement and Concrete Laboratory (Equipment Cost Rs. 20,42,293/-)

#### List of the equipment

- Computerised Compression Testing Machine (3000 kN)
- Cement Mortar Mixing Apparatus
- Compaction Factor Apparatus
- Concrete Mixer, Pan type
- Sieve Shaker
- Le-Chatelier Apparatus
- Bulk Density Apparatus

- Cement Mortar Vibrating Machine
- Consistometer
- Vibrating Table
- Blaines Air Permeability Apparatus
- Vicat Apparatus
- Slump Cone



**Computerised Compression Testing Machine** 



**Cement Mortar Vibrating Machine** 

# Highway Materials Testing Laboratory (Equipment Cost Rs. 6,02,494/-)

#### List of the equipment

- Los Angeles Abrasion Machine
- Bitumen Ductility Apparatus
- Softening Point Apparatus
- Aggregate Crushing Apparatus
- Pycnometer

- Deval's Attrition Machine
- Centrifuge Extractor
- Flash and Fire Point Apparatus
- Density Basket
- Water Bath

- Marshall Stability Apparatus
- Bitumen Penetration Apparatus

- Aggregate Impact Apparatus
- Length Gauge/ Thickness Gauge
- Hot Air Oven



Los Angeles Abrasion Test Apparatus



Centrifuge Extractor



Marshall Stability Apparatus

# Environmental Engineering Laboratory (Equipment Cost Rs. 6,82,320/-)

## List of the equipment

- UV- Visible Spectrophotometer
- Jar Test Apparatus
- Conductivity Meter
- Hot Air Oven

- Magnetic Stirrer
- pH Meters
- DO Analyzer
- COD Digester

- Turbidity Meter
- Distilled water still

BOD Incubator







**UV Spectro Photometer** 

Jar Test Apparatus

**Environmental Engineering Lab** 

# Computer Aided Design & Drafting Laboratory (Software Cost. Rs. 8,30,863/-)

#### List of Software

Auto CAD

ETABS

STADD Pro

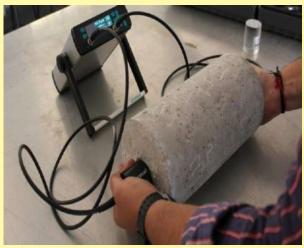


View of Computer Aided Design & Drafting Laboratory

# Structural Engineering Laboratory (Equipment Cost Rs. 8,61,931/-)

#### List of the equipment

- Concrete Permeability Apparatus
- Rebound Hammer
- **Self-Compacting Concrete Apparatus**
- **UV-Pulse Velocity Apparatus**
- **Accelerated Curing Tank**



**UV Pulse Velocity Apparatus** 



**Rebound Hammer Apparatus** 



**Concrete Permeability Apparatus** 

**Accelerated Curing Tank** 

Advanced Concrete Technology Laboratory (Equipment Cost Rs. 5,87,283/-)

# List of the equipment

- Air Entrainment Meter
- Concrete Penetrometer
- Hot Air Oven
- Length Comparator
- Compression Testing Machine (2000kN)
- Autoclave Apparatus
   Heat of Hydration Apparatus
- Vicat Apparatus
- Le-Chatelier's Apparatus
- **Longitudinal Compressometer**







Autoclave Apparatus and Compression
Testing Machine

# Project and Research Laboratory (Equipment Cost Rs. 33,45,000/-)

#### **Computerized Load Frame**

Four Column type of Computerised Load frame of 1000kN capacity in Flexure, Compression and 20 Tonnes in Lateral Load testing, with two modes of testing (Load Control Mode and Displacement Control Mode) facility is available. Beams, Columns and Slab Panels can be tested using the Load Frame. Cost of equipment is Rs. 32,50,000/-.

# **High Temperature Furnace**

1000° C Capacity High Temperature Furnace is available to conduct Thermal studies on specimens of different materials. Cost of equipment is Rs. 95,000/-.



**Computerized Load Frame** 



**High Temperature Furnace** 

# LIBRARY, INTERNET & OTHER FACILITIES



# B. Tech.

S. No	B. Tech	Volume	Title	Edition	Amount
1	General (Central Library)	3212	495	27	10,07,360.21
2	MSB (Central Library)	439			2,10,036.00
3	BB Books (Central Library)	27			
4	Dept. Library	193	178	4	27,778.00
	TOTAL	3871	673	31	12,45,174.21

#### M.Tech.

S. No	M. Tech	Volume	Title	Edition	Amount
1	Structural Engineering (Central Library)	584	82		2,51,032.40
2	Dept. Library	12	12		5,402.50
	TOTAL	596	94		2,56,434.90

#### **Journals**

S. No	Particulars	Quantity
1	E- Journals	209
2	E- Books	44
3	NPTEL	22
4	National Journals-Hard Copy	17
5	International Journals- Hard Copy	36

# CENTRAL LIBRARY - LIST OF JOURNALS SUBSCRIBED



# **INTERNATIONAL JOURNALS (ONLINE):**

S.NO.  Name of the Journal Journal Name Subscribed		Journal Name	Soft Copy (Details of Service Provider & No. Of User Licenses taken with License Validity periods)
1	ASCE	35 Journals	Global information systems technology pvt.ltd. Haryana & unlimited user license with one year validity period
2	DELNET	209 Journals	Developing library network, New Delhi & unlimited user license with one year validity period

# **NATIONAL JOURNALS (HARD COPIES):**

S. No	Name of the Journal
1	Civil Engineering Construction Review
2	Environment and WE
3	Indian Concrete Institute Journal
4	Indian Concrete Journal
5	Indian Geotechnical Journal
6	Indian Highways
7	Indian Journal of Engineering & Material Sciences
8	Indian Journal of Geosynthetics & Ground Improvement
9	Indian Journal of Power and River Valley Development
10	Indian Road Congress
11	Hydrology And GIS
12	Journal of Construction Engineering, Technology & Management
13	Journal of Institute of Engineers (India) Series A: (Architectural, Environmental and Agricultural Engineering)
14	Journal of Institute of Town Planners of India
15	Journal of Remote Sensing & GIS
16	Journal of Structural Engineering
17	Recent Trends in Civil Engineering & Technology

# AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) COMPLETE PACKAGE



## **JOURNALS TITLES (2017-18)**

- International Journal of Geomechanics
- 2. Journal of Aerospace Engineering
- 3. Journal of Architectural Engineering
- 4. Journal of Bridge Engineering
- 5. Journal of Cold Regions Engineering
- 6. Journal Composites for Construction
- 7. Journal of Computing in Civil Engineering
- 8. Journal of Construction Engineering and Management
- 9. Journal of Energy Engineering
- 10. Journal of Engineering Mechanics
- 11. Journal of Environmental Engineering
- 12. Journal of Geotechnical and Geoenvironmental Engineering
- 13. Journal of Hazardous, Toxic, and Radioactive Waste
- 14. Journal of Highway and Transportation Research and Development, English Edition
- 15. Journal of Hydraulic Engineering
- 16. Journal of Hydrologic Engineering
- 17. Journal of Infrastructure Systems
- 18. Journal of Irrigation and Drainage Engineering
- 19. Journal of Legal Affairs and Dispute Resolution in Engineering and Construction
- 20. Journal of Management in Engineering
- 21. Journal of Materials in Civil Engineering
- 22. Journal of Nanomechanics and Micromechanics
- 23. Journal of Performance of Constructed Facilities
- 24. Journal of Pipeline Systems Engineering and Practice
- 25. Journal of Professional issues in Engineering Education and Practice
- 26. Journal of Structural Engineering
- 27. Journal of Surveying Engineering

- 28. Journal of Transportation Engineering
- 29. Journal of Urban Planning and Development
- 30. Journal of Water Resources Planning and Management
- 31. Journal of Waterway, Port, Coastal, and Ocean Engineering
- 32. Leadership and Management in Engineering
- 33. Natural Hazards Review
- 34. Practice Periodical on Structural Design and Construction
- 35. ASCE-ASME Journal of Risk and Uncertainty in Engineering Systems, Part A: Civil Engg.
- 36. Journal of Sustainable Water in the Built Environment

## CVR Journal of Science and Technology, CVR Newsletter

- (i) News Letter: Aegle Vista- Newsletter is published twice in every year. Newsletter encapsulates the developments in all Departments, technical events conducted within the departments.
- (ii) Technical Journal: College publishes in house journal "CVR Journal of Science & Technology" with ISSN No.2277-3916, twice in a year. This has editorial board with senior professors from college and from other Universities/ Institutions. Dr. Lal Kishore, Dean Research is the Chief Editor. Invitation is sent to colleges for receiving technical papers. The papers received in a prescribed format are selected by a screening committee. Such papers are published in the journal. This favours us to enrich our knowledge about the recent advancements and upcoming trends in the field of Civil Engineering.

S. No.	Magazine / News Letter	Description	Periodicity
1	Aegle Vista issue 1	Details of college level activities	Half-yearly
2	Aegle Vista issue 2	Details of college level activities	Half-yearly
3	CVR Journal of Science and Technology with ISSN 2277-3916	Invites research articles from faculty of our college and many other colleges. (ISSN 2277-3916)	Half-yearly

# CIVIL ENGINEERING ASSOCIATION



A Civil Engineering Association (CEA) has been formed by the students of the Department for the benefit of students to impart additional knowledge in the field of Civil Engineering apart from the prescribed curriculum by organizing Guest lectures by eminent specialists from universities and industry, Technical Quiz, Workshops, Model Making Contests by students will help to develop the organizing capabilities among the students.

# DETAILS OF GUEST LECTURES/ SEMINARS/WORKSHOPS/AWARENESS CAMPS CONDUCTED BY EXTERNAL EXPERTS

# **Guest Lectures organized by Civil Engineering Association:**



Guest Lecture by Dr. Muneender Erukulla, Director, Vishwa Technologies, Hyderabad (27 July 2017)



Guest Lecture by Mr. Subbarao Mukunda, Geotechnical Consultant, Hyderabad (21 July 2017)



Guest Lecture by Mr. Sridhar Reddy, Managing Director, Sri Harsha Consultants, Hyderabad (18 July 2017)



Guest Lecture by Sri. Parakala Srinivas, General Manager, Sri Sri Gruhanirman India Pvt. Ltd, Hyderabad (13 July 2017)



Guest Lecture by Sri. G Sunil, Managing Director, Gorle Group Structural Engineering, Hyderabad (06 July 2017)



Guest Lecture by Dr. Venkaiah Chowdary, Asst. Professor of Civil Engineering, NIT Warangal (27 Jan 2017)



Guest Lecture by Dr. M. Kumar, Professor of Civil Engineering, Osmania University, Hyderabad (21 September 2016)



Guest Lecture by Dr.G. Neelima Satyam, Asst. Professor of Civil Engineering, IIIT Hyderabad (12 July 2016)



Guest Lecture by Dr.N.Narayana, Professor, Dept.of Civil Engg., CVR College of Engineering (5 September 2015)



Memento felicitation to Dr.M.Amarnath Reddy, Assoc.Professor, IIT, Kharagpur for delivering a guest lecture (7 July 2015)



Memento felicitation to Mr.M. Sridhar, Vice President, SEW Infrastructure, Hyderabad, for delivering a guest lecture (22 September 2014)



Guest Lecture by Dr. S.Krishna, Vice President, Aarvee Associates, Hyderabad (17 October 2014)



Guest Lecture by Mr.P.D. Varadarajan, Asst.Vice President, VASCON, Pune (14 October 2014)



Guest Lecture by Dr.K.SrinivasaRaju, Professor, BITS-Pilani, Hyderabad (12 August 2014)



Guest Lecture by Dr.M.V.Seshagiri Rao, Professor, JNTU, Hyderabad (23 January 2014)



Guest Lecture by Mr. M.V.RamanaMurthy, Executive Engineer, APGENCO, Hyderabad (27 December 2013)



Felicitating Dr. E.Sai Baba Reddy, Professor & Rector, JNTUH in the inaugural function of CEA (2 September 2013)

# **Details of Guest Lectures Organised:**

S.No.	Topic of Guest Lecture	Date	Name of the Guest Speaker	Designation	Organization		
1.	Carrer Opportunities for Civil Engineers	July 27, 2017	Dr. Muneender Erukulla	Director	Vishwa Technologies, Hyderabad		
2.	Geotechnical Engineering in Infra Structure Development	July 21, 2017	Sri. Subbarao Mukunda	Geotechnical Consultant	Geotechnical Consultant, Hyderabad		
3.	Career Guidance	July 18, 2017	Sri. Sridhar Reddy	Managing Director	Sri Harsha Consultants, Hyderabad		
4.	Project Planning, Estimation & Costing of High Rise Buildings	July 13, 2017	Sri. Parakala Srinivas	General Manager	Sri Sri Gruhanirman India Pvt. Ltd.Hyderabad		
5.	Career Guidance	July 06, 2017	Sri. G Sunil	Managing Director	Gorle Group Structural Engineering, Hyderabad		
6.	Integrated Urban Flood Management in India	Jan 28, 2017	Dr. Uma Mahesh	Professor	NIT, Warangal		
7.	IRC Method of Flexible Pavement Design	Jan 27, 2017	Dr. Venkaiah Chowdary	Asst. Professor	NIT, Warangal		
8.	Irrigation Canal Operation Plan	Jan 6, 2017	Sri. Ghanta Surender	Director (ITC)	WALAMTARI, Hyderabad		
9.	Future Scope & Challenges of Transportation Engineering	Sep 21, 2016	Dr.M. Kumar	Professor	Osmania University, Hyderabad		
10.	Design of Foundations for Tall Buildings	Jul 12, 2016	Dr.G. Neelima Satyam	Asst. Professor	IIIT Hyderabad		
11.	Cement: An overview of Manufacturing process & properties	Sept 05, 2015	Dr. N Narayana	Professor	CVR College of Engineering, Hyderabad		
12.	Role of Construction Chemicals in the World of Concrete	July 23, 2015	Sri.N Suresh & Mr.G. Ravi Kiran	Technical Engineer & Sales Engineer	BASF, Hyderabad.		
13.	Smart Cities: Boon for Infrastructure Opportunities.	July 07, 2015	Dr. Amarnath Reddy	Associate Professor	IIT Kharagpur		

14.	Behaviour of Continuous Structures & Segmentally Constructed Bridges	Oct 17, 2014	Sri.Krishna Sandepudi	Vice President	Aarvee Associates Pvt. Ltd, Hyderabad
15.	Shuttering Systems & Their Significance in Construction Sector	Oct 14, 2014	Sri.P.D.Varadarajan	Vice President	VASCON Engineers Ltd, Pune
16.	Career Opportunities & Employable Skills for Civil Engineers	Sept 22, 2014	Sri.M.Sridhar	Vice President	SEW Infrastructure, Hyderabad
17.	Recent Developments in Water Resources Engineering-Case Studies	Aug 12, 2014	Dr.K.Srinivasa Raju	Professor	BITS Pilani, Hyderabad
18.	Latest Developments in Concrete Technology	Jan 23, 2014	Dr.M.V.SeshagiriRao	Professor	JNTU,Hyderabad
19.	Planning & Construction of Hydro Power Projects	Dec 27, 2013	Sri.M.V.Ramana Murthy	Executive Engineer	APGENCO, Hyderabad

# Workshops organized by Civil Engineering Association





Three Day In-House workshop on "Urban Traffic Modelling Using VISSIM (UTMV-2017)" (09-11th November 2017)





Three Day In-House workshop on "Analysis and Design of R.C.C and Steel Structures Using ETABS" (21-23rd September 2017)





One Day In-House Workshop on "Application of STAAD Pro in Civil Engineering" CVR College of Engineering, Hyderabad (22nd July 2017)







Two Day National Workshop on Finite Element Formulations in Civil Engineering Applications, CVR College of Engineering, Hyderabad (30 & 31 January 2015)





One Day Workshop on "Recent Developments in Construction Practices" CVR College of Engineering, Hyderabad (22 September 2015)

# **Details of Workshops Conducted:**

S.No.	Topic of Workshop Conducted	Date	Name of the Guest Speakers	Designation	Organization
1	Three Day In-House Workshop on "Urban Traffic Modelling Using Vissim (Utmv-2017)"	09 – 11th November 2017	Mr. Vivek Singh	Consultant and Trainer	Civil Simplified Bangalore
2	Three Day In-House Workshop on "Analysis and Design of R.C.C and Steel Structures Using ETABS	21-23 <sup>rd</sup> September 2017	Mr. Ashok	Consultant and Trainer	ARK Info solutions Pvt. Ltd. Hyderabad
3	One-day Workshop on Application of STAAD Pro and ETABS in Civil Engineering	22nd July 2017	Mr. Ashok	Consultant and Trainer	ARK Info solutions Pvt. Ltd.
4	Two Day National Workshop on "Finite Element Formulations in Civil Engineering Applications"	Jan 30 & 31, 2015	Dr. M. Koti Reddy Dr.Ravinder Reddy Dr.Rupesh Kumar	Professor Professor Asst. Professor	CBIT, Hyderabad CBIT, Hyderabad O.U, Hyderabad
5	One day In-House Workshop on "Recent Developments in Construction practices"	Sept 22, 2015	Dr. K.V.L Subramanyam Er. B.K.Eswar Dr. M. V. SeshagiriRao	Professor & Head Technical Director Professor	Civil AID Technoclinic Pvt.ltd. Hyderabad JNTU Hyderabad

#### **INDUSTRIAL VISITS**



Vizag Steel Plant, Visakhapatnam



Bhavanam Ready Mixed Concrete Private Limited, Adibatla, Hyderabad



Construction Skills Training Institute (CSTI), Jadcherla, Hyderabad



L&T, Building on Transit (BoT) Project site, Moosrambagh, Hyderabad



National Institute of Rural Development & Panchayat Raj, Rajendra Nagar, Hyderabad



National Institute of Rural Development & Panchayat Raj, Rajendra Nagar, Hyderabad



Survey of India, Indian Institute of Survey & Mapping (IISM), Uppal, Hyderabad



L&T Construction Skilled Training Institute (L&T CSTI), Jadcherla



Jeedimetla Effluent Treatment Ltd, Hyderabad



Traffic Management Centre, Bangalore.



Geological Survey of India, Hyderabad.



Geological Survey of India, Hyderabad.

Date	Industry Visited
10&11 August 2017	Vizag Steel Plant, Visakhapatnam
07 & 08 July 2017	Bhavanam Ready Mixed Concrete Private Limited, Adibatla, Hyderabad
25 & 27 February 2017	Construction Skills Training Institute (CSTI), Jadcherla, Hyderabad
5 & 6 January 2017	L&T, Building on Transit (BoT) Project site, Moosrambagh, Hyderabad
12 & 13 August 2016	National Institute of Rural Development & Panchayat Raj, Rajendra Nagar, Hyderabad
17 March 2016	National Institute of Rural Development & Panchayat Raj, Rajendra Nagar, Hyderabad
11 & 12 February 2016	Survey of India, Indian Institute of survey & Mapping (IISM), Uppal, Hyderabad
19 December 2015	L&T Construction Skilled Training Institute (L&T CSTI), Jadcherla.
12 & 13 August 2015	Geological Survey of India (GSI), Hyderabad.
21 December 2014	Bongaluru Outer Ring Road, Hyderabad.
18 October 2014	Jeedimetla Effluent Treatment Ltd. (JETL), Hyderabad
27 December 2013	Traffic Management Centre (TMC), Bangalore.

# Faculty recharge by attending National and International Workshops & Guest Lectures:

S.No	Name of the Workshop	Dates	Organized by	Venue	Attended by
1	One-day National Workshop on "Seismic Design and Detailing of Reinforced Concrete Buildings"	09th December 2017	JNTU Hyderabad	JNTU Hyderabad	Mr. B.Jagadeesh
2	One-day National Workshop on "Seismic Design and Detailing of Reinforced Concrete Buildings"	09th December 2017	JNTU Hyderabad	JNTU Hyderabad	Mrs.S.Jyothsna
3	One-day National Workshop on "Seismic Design and Detailing of Reinforced Concrete Buildings"	09th December 2017	JNTU Hyderabad	JNTU Hyderabad	Ms. J.Sandhya Rani
4	One Week National Workshop On "Traffic and Transportation Planning for Smart Cities" (TTPSC 2017)	20-25 <sup>th</sup> November 2017	VNR Vignana Jyothi Institute of Engineering & Technology Hyderabad	VNR VJIET Hyderabad	Ms. G.Sharanya
5	One Week National Workshop On "Traffic and Transportation Planning for Smart Cities" (TTPSC 2017)	20-25 <sup>th</sup> November 2017	VNR Vignana Jyothi Institute of Engineering & Technology Hyderabad	VNR VJIET Hyderabad	Mr. K.Mahesh

	Name of the Workshop	Dates	Organized by	Venue	Attended by
S.No	Name of the Workshop	22nd	Organized by	venue	Attornation by
6	One-day National Workshop on "Bitumen Rheology"	September, 2017	BITS-PILANI	Hyderabad Campus	Ms. G. Sharanya
7	One-day National Workshop on "Bitumen Rheology"	22nd September, 2017	BITS-PILANI	Hyderabad Campus	Mr. M. Vamsi
8	Three-day National workshop on "Waste Management Technologies for Urban Areas"	23 to 25 Jan, 2017	NIT, Warangal	NIT, Warangal	K. Ravi Chandra Reddy
9	Two-day National workshop on "Structural Health Monitoring and Condition Assessment of Existing Structures" (SHMCAES-2017)	20 & 21 January, 2017	Osmania University, Hyderabad	Osmania University, Hyderabad	Mr.S. Praveen
10	Two-day workshop on "Good Concrete Construction Practices (GCCP 2016)"	28 & 29 Oct, 2016	Osmania University, Hyderabad	Osmania University, Hyderabad	Mrs. Sharmistha Masih
11	Two-day workshop on "Design, Construction, Evaluation and Maintenance of Cement Concrete Pavements"	21 & 22 Oct, 2016	Osmania University, Hyderabad	Osmania University, Hyderabad	Mr.K.Mahesh, Mr.G.Sai Anvesh, Ms.P.Divya Mr.V.Venkataramana
12	Two-day National workshop on "Computer Applications in Civil Engineering"	21st & 22nd Oct, 2016	Vasavi College of Engineering, Hyderabad	Vasavi College of Engineering, Hyderabad	Mrs.S.Jyothsna Reddy, Ms.G. Sharanya, Ms.J.Sandhya Rani Mr.N.Ramanjaneyulu
13	One-day National Workshop on "Geo-Disaster - Ground and Slope Instability"	01 Oct, 2016	JNTU, Hyderabad	JNTU, Hyderabad	Ms.G.N.S.Niharika Rao, Mr.K.Vijay Kiran, Mr.M.Ashok Kumar, Mr.B. Ramanjaneyulu
14	Six-day workshop on "Data Science and Big Data Analytics"	19 thru 24 Aug, 2016	Electronics and ICT Academy, NIT, Warangal	CVR College of Engineering, Hyderabad	Mr.M.R.Rajagopal
15	One day workshop on "Advances in concrete technology and good construction practices"	26 May, 2016	JNTU- Hyderabad	JNTU- Hyderabad	Mr. N.Ramanjaneyulu, Ms. J.Sandhya Rani, Ms. G.Sharanya
16	Two-day National workshop on "Emerging Trends in Structural Engineering"	11 & 12 Mar 2016	DST-SERB	K.L.University	Ms. P.Divya
17	Two-day International workshop on "Rebooting Infrastructure"	Nov 26 & 27, 2015	CII	Bengaluru, Karnataka	Dr.N.Narayana
18	One day Workshop on "Outcome based Education & Accreditation"	Sep 14, 2015	JNTU, Hyderabad	JNTU, Hyderabad	Dr. T.Muralidhara Rao

S.No	Name of the Workshop	Dates	Organized by	Venue	Attended by
19	One day National symposium on "Recent Advances in Pavement Technology"	Mar 13, 2015	MVSR Engineering College, Hyderabad	MVSR Engineering College, Hyderabad	Mr.S. Praveen
20	International Workshop on "Geotechnical Symposium on Disaster Mitigation in Special Geo- Environmental Conditions"	Jan 21 thru 23, 2015	IIT, Madras	IIT, Madras	Ms.D.D.N.Laxmi Devi
21	International workshop on "Emerging trends in Earthquake Engineering and Structural Dynamics". Organized by Indian Association of Structural Engineers (IASE)	Dec 19 & 20, 2014	Structural Engineering	IIT, Delhi	Mrs. B.Uma Radha
22	Two-day National workshop on "Project Management National India"	Sep 12 thru 14, 2014	PMI India	Novotel, Hitex Hyderabad	Mr. M. R. Rajagopal
23	One -day National workshop on "Developments in Earth Sciences and Earthquake Engineering"	Apr 25, 2014	CBIT	CBIT, campus	Ms.J.Sandhya Rani
24	Two-day National workshop on "Advances in Fibre Reinforced Polymers and Composites"	Mar 13 & 14, 2014	CBIT	CBIT, campus	Ms.J.Sandhya Rani
25	Two-day National workshop on "Recent Advances in Civil Engineering"	Jan 3 & 4, 2014	ACE Engineering College	ACE Engineering College	Mr. N. Ramanjaneyulu Mr.K.Rajendra Prasad
26	National workshop on Meeting Infrastructure challenges"	Oct 23 thru 26, 2013	ICI-IWC-2013	Hitex, Madhapur	Mr. N. Ramanjaneyulu
27	National workshop on "Geopractices-2013	Oct 4, 2013	IGS, JNTUH	JNTUH	Mr.D.Yugandhar
28	National workshop on "Pavement Materials and Pavement Design"	Sep 21, 2013	JNTUH	JNTUH	Mr.B.H.Mahesh Mr.Chandrakanth, Mr.S.Praveen
29	National workshop on "Seismic Energy Dissipation Systems"	May 9, 2013	IIT, Hyderabad	IIT, Hyderabad	Mrs.B.UmaRadha
30	National workshop on "Seismic Energy Dissipation Systems"	May 9, 2013	IIT, Hyderabad	IIT, Hyderabad	Mr.K.Rajendra Prasad
31	National workshop on "Learning Outcomes"	Mar 16, 2013	CVR College of Engineering	CVR Campus	Mr. K. Rajendra Prasad
32	National workshop on "Design and Analysis on STAAD.PRO"	Jan 23 & 24, 2013	GRIET, Hyderabad	GRIET, Hyderabad	Mr.K.Rajendra Prasad

S.No	Name of the Workshop	Dates	Organized by	Venue	Attended by
33	National workshop on "Advanced surveying and mapping using total station - hands on practice"	Jan 18 & 19, 2013	VNR VJIET	VNR VJIET Campus	Mr. N. Ramanjaneyulu
34	National workshop on "Structure-Foundation Interaction Analysis in Reservation & Reconstruction of Historical Monuments"	Dec 13, 2012	IIIT, Hyderabad	IIIT, Hyderabad	Mrs.B.Uma Radha
35	One day Workshop on "Manufactured sand-its utilization"	Sept 6, 2012	Dept. of Mines of Geology Govt. of AP	Vishakhapat nam	Dr. N. Narayana
36	One day Workshop on "Arc GIS"	Aug 25, 2012	KL University, AP	KL University, AP	Ms.P.Divya
37	Two-day Workshop on "Environmental Challenges for the New Millenium"	Nov 25, 26 2010	GPREC, Kurnool, AP	GPREC, Kurnool.	Dr.T.Muralidhara Rao
38	12 <sup>th</sup> NCB International Seminar	Nov 15 thru 18, 2011	NCB, Delhi	NCB, Delhi	Dr. N. Narayana
39	One day Workshop on "Concrete day Programme"	Oct 7, 2011	ICI	Hyderabad	Dr. N. Narayana
40	Earthquake Engineering literature survey workshop	Jul 7-16 2011	NICEE	IIT, Kanpur	Mr.B.Mallikarjun, Mr.K.Rajendra Prasad

# Faculty recharge by attending the National / International Conferences:

S. No	Name of the conference	Dates	Organized	Venue	Attended by
1	78th Annual Session of the Indian Roads Congress	3-6 <sup>th</sup> November 2017	Indian Roads Congress	Bengaluru	Mr. M.Vamsi
2	International Conference on "Indian Society for Theoretical and Applied Mechanics"	15th-18th, December 2017	IIT Kharagpur	Osmania University	Mr. K. N. V Chandrasekhar Dr. T. Muralidhara Rao
3	National Conference on "Sustainable Practices and Advances in Civil Engineering"	1st September 2017	Department of Civil Engineering	KITS Warangal.	Mr. S Praveen
4	Two-day International Conference on "Integrated Solid Waste Management Practice in Developing Countries"	11 & 12 April, 2017	CSIR - National Environmental Engineering Research Institute	(CSIR - NEERI), Nagpur	Mr. K. Ravi Chandra Reddy
5	International Conference on 'Geotechniques For Infrastructure Projects'	Feb 27 & 28, 2017	Indian Geotechnical Society	KTDC Mascot Hotel, Trivandrum	Mr. K. Vijay Kiran, Mr. B. Ramanjaneyulu & M Ashok Kumar
6	Three-day national level conference on "Transportation Planning & Implementation Methodologies for Developing Countries"	19 — 21 December, 2016	Civil Department	IIT Bombay	Mr. A. Vamsi Chaitanya
7	National Conference on "Sustainable Materials and Management Systems in Civil Engineering"	15-16 December 2016.	CBIT, Hyderabad	CBIT, Hyderabad	Ms. J.Sandhya Rani
8	International Conference on "Indian Society for Theoretical and Applied Mechanics"	11-14 December 2016	IIT Kharagpur	IIT Kharagpur	Mr. K. N. V Chandrasekhar
9	A national conference on "Recent Trends in Civil Engineering"	Feb 20 & 21, 2015	GITAM Hyd	GITAM Hyd	Ms. J.Sandhya Rani
10	International conference on "Transportation Planning and Implementation Methodologies for developing countries", organized by the Transportation Systems Engineering (TSE) group	Dec 10 thru 12, 2014	Transportation System Engineering	IIT, Bombay	Ms.P.Shruthilaya

S. No	Name of the conference	Dates	Organized	Venue	Attended by
11	One day Seminar on "Green Cities" on World Earth Day – 2014	Apr 22, 2014	The Institute of Engineers India. (IEI)	IEI Main Building, Hyderabad	Mr.S.HariKiran
12	One day seminar on Leadership in Energy and Environmental Design	Sep 2013	IEI, Bhuwaneshwar	Bhuwaneshwar, Orissa	Mr.S.HariKiran
13	Recent Trends in Structural Engineering	Jan 6 & 7, 2012	VNR VJIET	VNR VJIET Campus	Mr.K.Rajendra Prasad
14	Two-Day National Conference on "Recent Innovations in Civil Engineering"	15th -16th December 2017	GRIET Hyderabad.	GRIET Hyderabad.	Mr. N.Ramanjaneyulu
15	International Conference on "Emerging Trends in Civil Engineering"	6 – 8 Jan. 2014	VNRVJIET, Hyderabad	VNRVJIET, Hyderabad	Dr. B. Naga Malleswara Rao
16	4thInternational Conference on "Hydrology and Watershed Management"	29 Oct. – 1 Nov. 2014	JNTU, Hyderabad	JNTU, Hyderabad	Dr. B. Naga Malleswara Rao
17	4th International Conference on "Hydrology and Watershed Management"	29 Oct. – 1 Nov 2014	JNTU, Hyderabad	JNTU, Hyderabad	Dr. B. Naga Malleswara Rao
18	International Conference on "Modelling Tools for Sustainable Water Resources Management"	26 – 29Dec. 2014	IIT, Hyderabad	IIT, Hyderabad	Dr. B. Naga Malleswara Rao
19	3rd International Conference on "Transportation Research Group of India (CTRG)"	17 – 20Dec 2015	IIT Kharagpur	IIT Kharagpur	Dr. B. Naga Malleswara Rao
20	National Conference on "Highways Construction Technology"	14 &15th July 2016	Hyderabad International Convention Center (HICC)	Hyderabad	Ms. G. Sharanya
21	National Conference on "Sustainable Water Resources planning, Management and Impact on Climate Change"	5 - 6, April 2013	BITS - Pilani, Hyderabad Campus	BITS - Pilani, Hyderabad Campus	Dr. B. Naga Malleswara Rao
22	National Conference on "Water, Environment & Society (NCWES- 15)"	30-31 July 2015	JNTUH Hyderabad	JNTUH Hyderabad	Dr. B. Naga Malleswara Rao

S. No	Name of the conference	Dates	Organized	Venue	Attended by
23	National Conference on "Climate Change & Sustainable Water Resources Management"	3-5 September, 2015	NIT, Warangal	NIT, Warangal	Dr. B. Naga Malleswara Rao
24	National Conference on "Disaster Preparedness, Mitigation and Reconstruction of Sustainable Society (DPMRSS-16)"	11-12 February, 2016	VNRVJIET	VNR VJIET	Dr. B. Naga Malleswara Rao
25	National Conference on "Water Resources and Flood Management with Special Reference to Flood Modelling (WRFM-2016)"	14-15, October, 2016	SVNIT, Surat	SVNIT, Surat	Dr. B. Naga Malleswara Rao

# Faculty recharge by attending the Short-term courses:

S.NO	Name of the Short- term course	Dates	Organized	Venue	Attended by
1	Five day Faculty Development Workshop on "Effective Teaching and Learning of Geotechnical Engineering using Field Practices and Case Studies"	06-10 <sup>th</sup> December 2017	NIT Warangal	NIT Warangal	Mr. E Srikanth
2	Five day Faculty Development Workshop on "Effective Teaching and Learning of Geotechnical Engineering using Field Practices and Case Studies"	06-10 <sup>th</sup> December 2017	NIT Warangal	NIT Warangal	Mr. B Ramanjaneyulu
3	Two-Week Faculty Development Programme on "Entrepreneurship Development"	30 October- 11 November 2017	National Institute for Micro, Small and Medium Enterprises	Hyderabad	Mr. M R Rajagopal
4	Two-Week Faculty Development Programme on "Entrepreneurship Development"	30 October- 11 November 2017`	National Institute for Micro, Small and Medium Enterprises	Hyderabad	Mr. P. Rama Krishna

S.NO	Name of the Short- term course	Dates	Organized	Venue	Attended by
5	5-Day GIAN Short term course on " Implementation of Advanced Transportation Management Systems (ATMS)"	4th to 8th September 2017	Department of Civil Engineering	NIT Warangal.	Mr. S Praveen
6	5-Day GIAN Short term course on " Implementation of Advanced Transportation Management Systems (ATMS)"	4th to 8th September 2017	Department of Civil Engineering	NIT Warangal.	Dr. Sadguna Nuli
7	An advanced training program in "Green Buildings",	22&23 December 2016.	Confederation of Indian Industry CII	Raidurg, Hyderabad	Mr. P. Yashwanth
8	Five-day short-term course on "Low- Volume Roads"	26 Sept to 30 Sep, 2016	NIT, Warangal	NIT, Warangal	Mr.M.Vamsi
9	Two-day training programme "BHUVAN OVERVIEW"	27 & 28 Jan 2016	National Remote Sensing Centre Hyderabad	National Remote Sensing Centre Hyderabad	Mrs. P.Neeraja
10	Three-week professional development program (TDP) on "Geospatial technologies applications in science and engineering research"	Dec 19, 2015 thru Jan 08, 2016	Sponsored by Department of Science and Technology (DST)	Gitam university, Vizag	Mrs.P.Neeraja
11	Modelling with Transportation Data (MTD)	Jun 08 thru 12, 2015	IIT Roorkee	IIT Roorkee	Mr.S.Praveen
12	Three-day short-term course on "Structural Engineering Convention"	Dec 22thru 24, 2014	Structural Engineering	IIT, Delhi	Mrs.B.Uma Radha

S.NO	Name of the Short- term course	Dates	Organized	Venue	Attended by
13	Open house organized by National information centre of earthquake engineering (Nicee).	Nov 3thru 12, 2014	Structural Engineering	IIT Kanpur	Mrs.B.Uma Radha
14	Five-day short-term course on "Finite Element Methods in Civil Engineering"	May 05 thru 09, 2014	Quality Improvement Programme (QIP), IIT Bombay	Quality Improvement Programme (QIP), IIT Bombay	Mr.N. Ramanjaneyulu
15	One -day short-term course on "Entrepreneurship Development"	Sep11, 2013	National Small Industries Corporation Ltd	NallaMalla Reddy Engineering College	Mr.K.Ravichndra Reddy
16	Five-day short-term course on "Formwork for Concrete Structures"	Jun 17 thru 21, 2013	IIT Delhi	IIT Delhi	Mr.N. Ramanjaneyulu & Mr.K.Rajendra Prasad
17	Faculty Development program on "Entrepreneurship"	Jun 20 thru July 3, 2012	Centre for Entrepreneurship Development	ACE Engineering College	Ms.P.Shruthilaya
18	Introduction to Forensic Engineering and Failure analysis	Jan 9 thru 13, 2012	NIT, Tiruchirappalli	NIT, Tiruchirappalli	Mr.K. Rajendra Prasad

## **DETAILS OF TEXT BOOKS WRITTEN BY FACULTY**

- 1. Dr. N. Narayana published a book on "Progress in Cement and Concrete: Testing and Quality Control in cement industry (Vol-3)" Optical Microscopy A quality control tool for the cement industry; ABI International Publication, New Delhi.
- 2. Dr. N. Narayana published a book on "Status of limestone availability and potential sites for setting large cement plants" (2nd Edition) SP-14-1991; NCB Publication, New Delhi.
- 3. Dr. N. Narayana published a book on "NORMS for Proving Limestone Deposits for cement manufacture" (3rd Edition) SP-9-03, November 2003, NCB Publication, New Delhi.

#### TECHNICAL PAPERS PUBLISHED IN JOURNALS BY FACULTY

- 1. Dr. T. Muralidhara Rao and Gopinath Reddy published a paper on "Flexural Behaviour of Reinforced Concrete Beams using ANSYS", CVR Journal of Science and Technology, Vol.12, June 2017, pp 1-12.
- 2. Mr. M. Ashok Kumar and B. Ramanjaneyulu published a paper on "A Case Study on Effect of Lead Effluent from Batteries on Soil Properties", CVR Journal of Science and Technology, Vol.12, June 2017, pp 13-17
- 3. Mr. Naveen Sharma and K.N.V Chandrasekhar published a paper on "Response of Reinforced Concrete Structural Components Subjected to the Blast Loading", CVR Journal of Science and Technology, Vol.12, June 2017, pp 18-24.
- 4. Mr.Laxmikanth Reddy and V. Naveen Kumar published a paper on "Behaviour of Magnetised Water Concrete under Different Curing Conditions", CVR Journal of Science and Technology, Vol.12, June 2017, pp 25-29.
- 5. Mr. K. Vijay kiran, Asst. Prof of Civil Department published paper on "Analysis of settlement at Different Depths of Granular Pile", in a three-day national level Indian Geotechnical Conference on "Geotechnology towards global Standards at IIT Madras", Chennai, from 15-17 December 2016.
- 6. Mr. B. Ramanjaneyulu, Asst. Prof of Civil Department published paper on "A Study to Co-Relate Field and Laboratory Test Results of C-\infty Soils", in a three-day national level Indian Geotechnical Conference on "Geo-technology towards global Standards at IIT Madras", Chennai, from 15-17 December 2016.
- 7. Mr. K.N.V Chandrasekhar, Asst. Prof of Civil Department published paper on "Aqua Search A New Metaheuristic Modified Firefly Algorithm for Topology Optimisation of Continuum Structures", in the journal of Offshore Structure and Technology Vol 3, No 3, December 2016.
- 8. Dr. M.V Seshagiri Rao, Professor and Dean of Civil Department published a paper on "Studies of Rheology, Strength and Cementing Efficiency of High Strength Grade Quaternary Blended Self-Compacting Concrete Incorporating High Reactivity Metakaolin", in the CVR Journal of Science and Technology, Volume 11, in December 2016.

- 9. Dr. T. Muralidhara Rao, Professor and Head of Civil Department published a paper on "Need for Fracture Behaviour based Designer Friendly Expressions for Fracture Energy and Minimum Flexural Reinforcement", in the CVR Journal of Science and Technology, Volume 11, December 2016.
- 10. Mr. P.V.V.S.S.R Krishna, Asst. Prof of Civil Department and Mr. Sreenath Mahankali, M.Tech student of Civil Department published paper on "Investigation on Effects of Nonlinear Static Procedures on the High Rise Buildings", in the CVR Journal of Science and Technology, Volume 11, December 2016.
- 11. Dr. T. Muralidhara Rao, Professor and Head of Civil Department and Ms. Manasa Koppoju, M.Tech of Civil Department Student published a paper on "Fracture Parameters of Plain Concrete Beams using ANSYS", in the CVR Journal of Science and Technology, Volume 11, December 2016.
- 12. Dr. T. Muralidhara Rao, N.Srikar, G.Sukesh Reddy, B.Praveen published a paper on "Ductility of Reinforced Concrete Beams", CVR Journal of Technology and Science, 2016.
- 13. Dr. T. Muralidhara Rao published a paper on "High Volume Fly Ash-A Boon for Preventing Reinforcement Corrosion", International Journal of Civil Engineering and Applications, Vol.3, No.7, June 2013, pp.52-55.
- 14. Dr. T. Muralidhara Rao published a paper on "Performance Evaluation and Efficiency Assessment of a Waste Water Treatment Plant–A Case Study", International Journal of Engineering Research & Technology, Vol.2 Issue 6, June, 2013, pp.1851-1855.
- 15. Dr. T. Muralidhara Rao published a paper on "Size Effect of Plain Concrete Beams-An Experimental Study", International Journal of Research in Engineering and Technology, Vol.2, Issue 6, June, 2013, pp.1047-1055.
- 16. Dr. T. Muralidhara Rao published a paper on "A Critical Comparative Study of IS: 800-2007 and IS: 800-1984", International Journal of Civil Engineering and Technology, Vol.4, Issue 4, July-August 2013, pp.36-54.
- 17. Dr. T. Muralidhara Rao published a paper on "Fracture Parameters of High Strength Concrete-An Experimental Study", Journal of Structural Engineering, Vol.35, No.6, Feb-Mar 2009, pp.397-403.
- 18. Dr. N. Narayana received best paper award for "Utilization of Limestone Slab Quarry rejects for the manufacture of cement" presented at the 9th NCB International Seminar on Cement and Building Materials held from 08, Nov 2005; New Delhi.
- 19. Dr. N. Narayana published a paper on "Limestone Availability for Greenfield Cement Projects in India." Indian Cement Industry Desk Book-95, (5th Edition), Bombay.
- 20. Dr. N. Narayana published a paper on "Computer Aided Evaluation of an Intricate Limestone Deposit A Case Study: Cement Industry (Annual Review)", 1991.
- 21. Mr. S. HariKiran published a paper on "Getting 23 Million Gallons a Day into the Ground: Preliminary Design for a Reclamation Plant's Recharge Facilities" in June 2009 at American Water Works Association, San Diego, California, USA.
- 22. Mr. S. HariKiran published a paper on "Selecting a Membrane Filtration System for RO Pre-Treatment: The South District Experience" at American Membrane Technology Association Conference, June 2011, Las Vegas, Neveda, USA.

- 23. Mr. N. Ramanjaneyulu published a paper on "Effect of packing factor on workability and mechanical properties of high strength self-compacting concrete (M70 grade) with GGBS and micro silica as filler material" Proceedings of International Conference on Emerging Trends in Civil Engineering (ICETCE-2014) during 6-8 January 2014, Hyderabad.
- 24. Mr. A. Venkat Reddy published a paper on "Optimization of fly ash content in different grades of magnetic water concrete" in International Journal of Research in Engineering and Technology, Volume 04, Special Issue 13, eISSN: 2319-1163 | PISSN: 2321-7308 page no 51-56.
- 25. Ms. A. S. Sravanthi published a paper on "Stabilization of Expansive soils using brick kiln waste" in International Journal of Applied Sciences, Engineering and Management ISSN 2320-3439, Vol. 02, No.03, May 2013, pp. 50-53.
- 26. Ms.G. Sharanya published a paper on "Evaluation of Rutting Characteristics on Warm Mix Asphalt with Inclusion of Fibers", JMS\_V3N3\_07, Oct-Dec 2015.
- 27. Dr. B.N. Malleshwar Rao published a paper on "Evaluation of CBR using Geosynthetics in Soil Layers" International Journal of Research in Engineering and Technology, p-ISSN:2321-7308
- 28. Dr. B.N. Malleshwar Rao published a paper on "Remediation of Heavy Metal Contaminated Soils" International Journal of Innovative Research in Science, Engineering and Technology, p-ISSN:2347-6710.
- 29. Dr. B.N. Malleshwara Rao published a paper on "Contamination Transport Modelling of Leachate at Municipal Solid Waste (MSW) Sites" International Journal of Innovative Research in Science, Engineering and Technology, p-ISSN:2347-6710
- 30. Dr. B.N. Malleshwara Rao published a paper on "Black Spot Identification and Audit Analysis for Heterogeneous Traffic Conditions in Hyderabad City A Case Study" i-manager's Journal on Structural Engineering, Vol. 4 No. 3 I September November 2015, PP 1-9, ISSN Print: 2278-7887, ISSN Online: 2320-2343.
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- 63. Dr T Muralidhara Rao and Dr.T.D. Gunneswara Rao Submitted a paper titled "Analytical Model for Minimum Flexural Reinforcement 0f RC Members-A Fracture Energy Approach", South African Journal of Institution of Civil Engineering 2017 (Under review)
- 64. KNV Chandrasekhar, Nss Sahithi, Dr.T Muralidhara Rao paper on "Parallel Computing To Perform Isogeometric Topology Optimisation of Continuum Structures Using Aqua Search Evolutionary Algorithm" is accepted for Journal of Recent Trends In Parallel Computing October, 2017
- 65. NSS Sahithi, KNV Chandrasekhar, Dr.T. Muralidhara Rao forwarded a paper titled "Isogeometric Topology Optimisation of Continuum Structures using Evolutionary Algorithms" Journal of Experimental & Applied Mechanics Volume 8, Issue 3, 2017.
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- 71. Dr.M.V.Seshagiri Rao, V.Srinivasa Reddy, Ch.Sasikala published a paper on "Performance of Microbial Concrete Developed Using Subtilus JC3" in the Journal of Institution of Engineers(India), DOI 10,1007/s40030-017-0227-x, ISSN 2250-2149 (2017).
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- 74. KNV Chandrasekhar, Dr.T.Muralidhara Rao published paper on "A Step by Step Illustrative Procedure to Perform Isogeometric Analysis and Find the Nodal Displacements of A Two Dimensional Plate Structure" imanager's Journal on Structural Engineering. ISSN Print: 2278-7887 ISSN Online: 2320-2343(Volume No. 6, Issue No. 4)
- 75. KNV Chandrasekhar, NSS Sahithi, Dr. T. Muralidhara Rao published paper on "A Detailed Step Wise Procedure to Perform Isogeometric Analysis of a Two Dimensional Continuum Plate Structure II" Journal of Aerospace Engineering and Technology (JoAET), ISSN (Online): 2231–038X, ISSN (Print): 2348–7887.

# FEW IMPORTANT PROJECTS OF B.TECH.

#### In Academic Year 2014-2015

- ◆ Design of post tensioned prestressed concrete Beam slab bridge deck
- ◆ Design optimization of structural elements
- ◆ A Transport policy sensitive model for mode choice to CVRCE
- ◆ Feasibility study of bus Rapid Transit system on Hyderabad Traffic
- Dynamic analysis of Multi-storeyed building on sloping ground
- ♦ Site suitability analysis using GIS

#### In Academic Year 2015-2016

- ◆ Fire Analysis on Reinforced concrete structure using SAP 2000
- Analysis and design of natural draft cooling tower using SAP 2000
- ◆ Influence of magnetised water on strength properties of M20 grade concrete
- ◆ Effect of Magnetised water on soil properties
- ◆ Seismic response reduction of high rise building using various energy dissipation devices
- ◆ Design and detailing of a composite bridge deck system
- ◆ Influence of different super plasticizers on self-compacting concrete
- Mode choice modelling of leisure travel for Hyderabad city
- Structural design of auditorium for CVR College of Engineering

#### In Academic Year 2016-2017

- ◆ Project planning, scheduling and monitoring using EVM and risk analysis techniques
- Development of Microscopic Hydraulic conductivity model for clay affected soil using variable head method
- ◆ Optimisation of steel transmission tower
- → Buckling analysis of steel truss bridge
- ◆ Analysis of G+9 building by sequential failure approach using STAAD pro
- ♦ Development of best fit destination model for Hyderabad users
- ♦ Establishing relationship between CBR value and physical properties of subgrade soil
- ◆ Effect of salt solutions on compressibility of Montmorillonite
- ◆ Geometric design optimisation of village roads using MX road
- ♦ Maximization of fundamental frequency of continuum structures using model strain energy method
- ◆ Optimization layout of reinforcement for RCC structures
- Development of Macroscopic hydraulic conductivity model for sandy soil
- ♦ Accident studies and analysis using RS & GIS
- ◆ Numerical simulation & analysis of granular pile anchor foundation system
- → Impact of land use changes on micro-watershed using remote sensing and GIS

# FEW IMPORTANT PROJECTS OF M.TECH.

#### In Academic Year 2016-2017

- ◆ Topology Optimization of Continuum structures using Firefly Algorithm
- ◆ Torsional Behaviour of asymmetric buildings under Seismic loads using ETABS
- ◆ Flexural Behaviour of RC Beams Using ANSYS
- ◆ Behaviour of Magnetized Water Concrete under different curing conditions
- Fracture parameters of plain Concrete beams using ANSYS
- Response of Reinforced Concrete structural components under Blast loading
- ◆ Study on Seismic behaviour of irregular structures with and without setback
- Study on lateral stability of high rise buildings with Framed Shear Wall System and Framed Tube System
- ◆ Effect of non-linear Static analysis procedures on high rise buildings
- ◆ Long term strength studies of magnetized salt water on Concrete

# **CONSULTING SERVICES & MATERIAL TESTING OFFERED BY CIVIL DEPARTMENT**

The department has highly qualified and well experienced faculty in different fields of Civil Engineering offering consultancy services in the areas of Structural Analysis, Design and Drawing for Buildings, Bridges and Industrial Structures, Highway and Pavement Construction, Traffic Studies, Soil Investigation, Contouring and Preparation of Layout Plans, Land Use and Land Cover applications, Design of Water Treatment Plants, Sewage Treatment Plants, Sewerage Systems, Water Distribution Systems and Canal Designs.

The various facilities and fields of consultancy are listed below:

# **♦ STRUCTURAL ENGINEERING**

Structural Analysis, Design and Drawing, Design scrutiny works for Buildings, Bridges and industrial Structures, Structural audit works, Strength Tests, Material Testing, Quality Control Tests, Non-destructive Testing for any required strength.

# **◆ TRANSPORTATION ENGINEERING**

Testing of any material used for Highway and Pavement Construction, Highway Geometric Design, Design of Pavements, Traffic Volume Study, Origin and Destination Study, Speed and Delay Study, Breaking Test and Accident Studies.

#### ◆ GEOTECHNICAL ENGINEERING

Soil investigation of any site involving conducting field tests with technical reports.

Surveying (Using Total Station)

All survey works to fix Levels, Contours and Layout plans preparations etc.

#### ◆ REMOTE SENSING AND GIS

Visual interpretations of data, Land use/ Land cover applications, Facility management and Digitization of Navigation data.

#### ◆ ENVIRONMENTAL ENGINEERING

Design of Water Treatment Plants, Sewage Treatment Plants, Sewerage Systems, Waste-to-Energy Projects, Industrial Effluent Treatment Plants, Solid Waste Management, Desalination Plants using Reverse Osmosis System.

#### ♦ WATER RESOURCES ENGINEERING

Water Distribution Pipe Line Design and Canal Designs.

# PERFORMANCE OF GRADUATED STUDENTS

Graduation Year	Sanctioned Intake	Present strength of students	Number of students appeared for Final Exams	Number of students passed in Final Exams	Percentage pass
2017	120	117	117	104	89
2016	60	59	59	49	83
2015	60	54	54	51	94

# **CONTACT US:**

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Rangareddy(D),Telangana501510

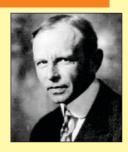
Email:tmuralidhararao@cvr.ac.in

Mobile:9989214274

# **EMINENT SCIENTISTS**

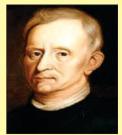


STEPHEN TIMOSHENKO
December 22, 1878 – May 29, 1972
Father of Modern Engineering
Mechanics.

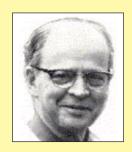


KARLVON TERZAGHI
October 2, 1883 – October 25, 1963
Father of Soil Mechanics

ROBERT HOOK July 18, 1635 — March 3, 1703 Father of Hooke's Law



ARTHUR CASAGRANDE
August 28, 1902 - September 6, 1981
Father of A-Line

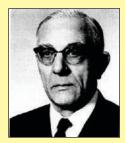


JOSEPH ASPDIN
December, 1778 – 20 March, 1855.
Father of Portland Cement.



SIR A. WESTLEY SKEMPTON 4 June 1914 - 9 August 2001 Eminent Soil Mechanics Expert

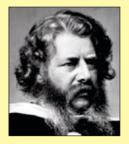
**DUFF A. ABRAMS** 1880 – 1965 Father of Abram's Law



RALPH BRAZELTON PECK
June 23, 1912 - February 18, 2008
Eminent Soil Mechanics Expert



THOMAS YOUNG
13 June 1773 – 10 May 1829
Father of Young's Modulus



WILLIAM JOHN RANKINE
July 1820 – December 1872
Eminent expert in Geotechnics

CHARLES-AUGUSTIN DE COULOMB

14 June 1736 – 23 August 1806 Father of Coulomb's Law



WILLIAM SMITH
23 March 1769 – 28 August 1839
Father of English Geology



