

# BEACON

<http://mcet.in/?civil=newsletter-magazine>

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## Vision of the Institute

We develop a globally competitive workforce and entrepreneurs.

## Mission of the Institute

Dr. Mahalingam College of Engineering and Technology, Pollachi endeavors to impart high quality, competency based technical education in Engineering and Technology to the younger generation with the required skills and abilities to face the challenging needs of the industry around the globe. This institution is also striving hard to attain a unique status in the international level by means of





## About the Department:

The department of Civil Engineering has been in existence since 2007 and has grown into a fully fledged department offering courses leading to B.E degree (4 years) in Civil Engineering and M.E (2 years) in Structural Engineering. The department has well qualified faculty and supporting staff in areas such as Structures, Geotech, Construction & Management, Environmental and Transportation Engineering.

The department places special emphasis on engineering automation. The students will be exposed to advanced computing techniques used for analysis and design. In this regard, the department provides opportunities for students to acquire knowledge in the latest softwares such as, STAADPRO, STAAD Foundation, STRUDS, GIS, Revit Architecture, AUTOCAD, MS Project and ANSYS. Expertise gained in these automation tools will enhance the competitive edge of our graduates in the ever tighter job market.

The Department actively promotes curriculum development activity by updating existing courses, developing new courses and preparing resource material for teaching. It undertakes industrial consultancy works as a part of its interaction with industry and also organizes seminars/symposia for professional interaction. The Department contributes to the interdisciplinary academic and research activity of the Institute.

The Department of Civil Engineering can provide you with outstanding preparation for a career in government service, private consulting, industrial research, or academia. We invite you to call or visit our department to learn more about our programs and specific areas of study.

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### Vision of the Department

*To develop competent Civil Engineers to meet the infrastructure challenges of India and the world*

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### Mission of the Department

- *To become one of the reputed departments offering Civil Engineering Program in the country.*
  - *To produce excellent engineers to cope up with the changes through dynamic, innovative and flexible curriculum.*
  - *To provide a conducive environment for teaching & learning and to develop leaders with effective communication skills.*
  - *To conduct quality research driven by industry & societal needs and provide affordable engineering solutions.*
- 

## Programme Educational Objectives (PEOs)

The Programme Educational Objectives (PEOs) of our department are,

The Graduate will

- PEO 1**    **Technical Expertise:** Have successful professional careers dealing with analysis, design and management of construction projects globally.
- PEO 2**    **Lifelong learning:** Exhibit attitude, professionalism, ability to communicate with team members and adapt to the latest trends by engaging themselves in continuous learning.
- PEO 3**    **Ethics:** Ethically apply their engineering knowledge and skills considering, societal, economic and environmental factors.

## Programme Outcomes (POs)

The graduates of Civil Engineering Programme will be able to:

- PO1.**    **Engineering knowledge:** Apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization in the field of Civil Engineering.
- PO2.**    **Problem analysis:** Identify, formulate, analyse and solve complex problems in construction industries using principles of mathematics, natural sciences and engineering sciences.
- PO3.**    **Design/development of solutions:** Design a solution for complex civil engineering problems and design system processes to meet specific needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
- PO4.**    **Conduct investigations of complex problems:** Conduct investigations of complex problems including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusion.

## Programme Outcomes (POs) – Continued

**PO5. 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.

**PO6. 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.

**PO7. Environment and sustainability:** Understanding the impact of engineering solutions in social environment and demonstrate the knowledge for sustainable expansion.

**PO8. Ethics:** Apply ethical principles and commit to professional ethics and the norms of engineering practices.

**PO9. Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams and in multidisciplinary settings.

**PO10. Communication:** Communicate with engineers and society to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions related to civil engineering professionals.

**PO11. Project management and finance:** Demonstrate and apply the knowledge of engineering and management principles to one's own work, as a team leader or a member to manage project in multidisciplinary environments.

**PO12. Life-long learning:** Recognize the need for, and have the ability to engage in independent and life-long learning in the context of technological change.

## Programme Specific Outcomes (PSOs)

**PSO1. Design process:** Design the fundamental elements of civil engineering systems, system components and processes considering safety, quality and cost consideration.

**PSO2. Quality and standards:** Able to plan and prepare design and construction documents such as specifications, contracts, engineering drawings and construction schedules

### Programmes offered

Programme Offered	B.E., Civil Engineering	M.E., Structural Engineering
Sanctioned Intake	60	18
Course Duration	4 Years	2 years

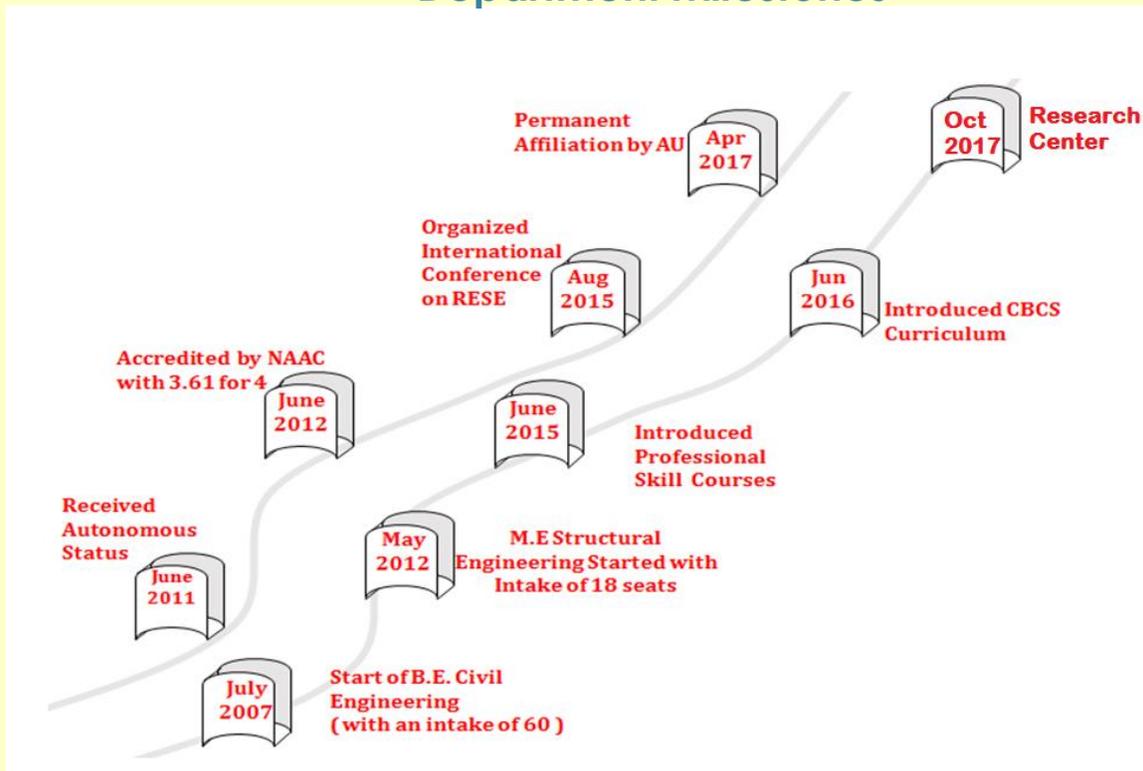
### Students strength

Strength	I year	II year	III year	IV year	Total
UG	45	67	67	65	244

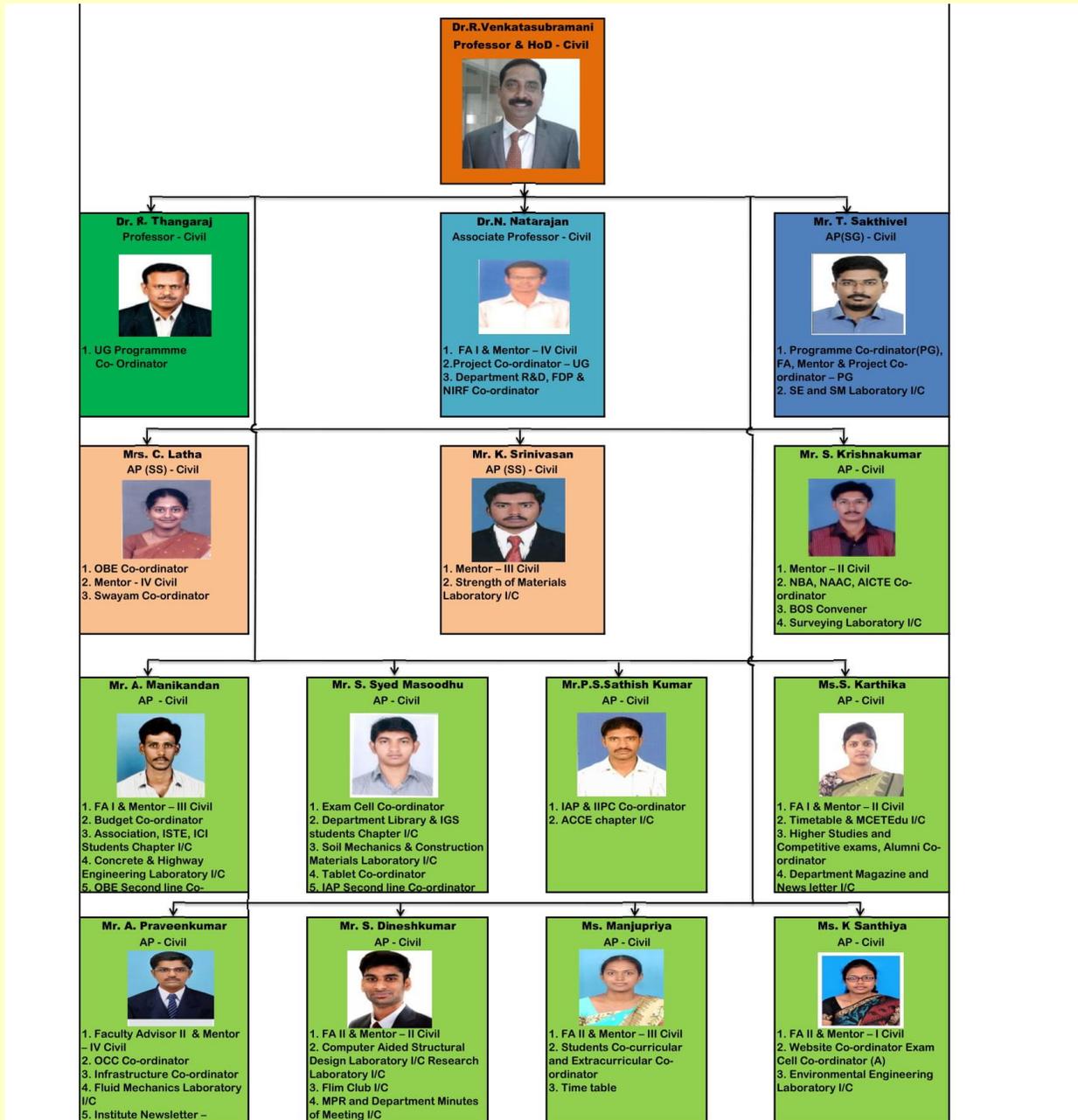
### Department Overview

- Established in the Year 2007 with B.E. Civil (Intake of 60)
- Autonomy status from 2011 onwards
- M.E. Structural Engineering started in the year 2012
- Accredited by NAAC with 'A' Grade in the year 2012
- Permanent Affiliation by Anna University, Chennai in the year 2017
- Accredited by NBA under Tier 1 in the year 2017
- Recognized as "Research centre" by Anna University in the year 2017

### Department Milestones



## Laboratory Details Department Profile



S.No	Name of the Laboratory	Total Equipment Cost	Room No	Laboratory Size
1	Surveying Practices Lab	19.1 Lakhs	E109	68 Sqm
2	Geotechnical Engineering Lab	12.1 Lakhs	E110	68 Sqm
3	Construction Materials Lab	3.3 Lakhs	E110	68 Sqm
4	Concrete Technology Lab	5.9 Lakhs	E102	68 Sqm
5	Environmental Engineering Lab	13.8 Lakhs	E214	102 Sqm
6	Strength of Materials Lab	12.7 Lakhs	D107	116 Sqm
7	Fluid Mechanics Lab	11.2 Lakhs	D107	154 Sqm
8	Computer Aided Structures Lab	11.5 Lakhs	E213	102 Sqm
9	Highway Engineering Lab	2.2 Lakhs	E102	68 Sqm
10	Structural Mechanics Lab	5.4 Lakhs	E201	68 Sqm
11	Structural Engineering Lab	15.8 Lakhs	E101	68 Sqm
12	Research Lab	11.9 Lakhs	E204	68 Sqm



Laboratories facilities in the department

- Atomic Absorption Spectrophotometer
- Impact Echo Apparatus
- Concrete Permeability Apparatus
- Loading Frame- 50 ton – Beam testing of 10' length, DAQ, LVDT, Strain Transducers, Accelerometer, Pressure transducer, thermocouple
- Horizontal Shake table- Eccentric Cam
- Flexure testing Machine- 10 ton
- FFT analyzer
- Total Station

S.NO	NAME OF THE STUDENT	COLLEGE	COURSE
1	Harish Saravanan PV	Anna University, Chennai	M.E. Construction Engg& Management
2	Anandha Raj L	Anna University, Chennai	M.E. Soil Mechanics & Foundation Engg
3	Aravindh P	Anna University, Chennai	M.E. Construction Engg& Management
4	Balasubramaniyan N	Anna University, Chennai	M.E. Construction Engg& Management
5	Surya K	Easwari Engineering College, Chennai	MBA
6	YaliniMeenakshi S	PSG College of Technology	M.E Infrastructural Engineering
7	Sangeetha K	PSG College of Technology	M.E Infrastructural Engineering
8	Karunya Grace A	Kongu engineering College	M.E. Structural Engineering
9	NeethuMurali Nair	Fanshawe University, London, Canada	PG Diploma in Construction Project management
10	Pravin Kumar M	Sri Krishna College of Technology	M.E. Structural Engineering
11	Goutham M	NIT, Jaipur	M.Tech Structural Engineering
12	Abbishek S	NICMAR, Pune	PGP in Advanced Construction Management

## Industry Linkages

- **Larsen & Toubro Ltd., Chennai**
- **Appaswamy Real Estates Limited, Chennai**
- **ArunExcello Construction LLP, Chennai**
- **CCCL, Chennai**
- **Petrofac Engineering Services (I) Pvt. Ltd. , Chennai**
- **Eversendai Construction Pvt. Ltd. , Chennai**
- **Coromandel Engineering Company Ltd. , Chennai**
- **Mantri Developers Pvt. Ltd. , Chennai**
- **Utracon Structural Systems Pvt. Ltd. , Chennai**
- **Ceebros Property Development Pvt. Ltd. , Chennai**
- **RCI Digital Solutions Pvt. Ltd. , Chennai**
- **Dimensions, Coimbatore**
- **Pyramid Designs India Pvt. Ltd., Coimbatore**
- **Srinivasan Associates Pvt. Ltd., Coimbatore**
- **GK Consultants, Coimbatore**
- **ACCE(I), Coimbatore**
- **INSWAREB, Visakhapatnam**
- **URC Construction (P) Ltd., Erode**
- **Association of Civil Engineers, Pollachi**

## Placement Statistics with pay package

S.No	Name of the Company	No. of students placed	Package Rs. (PA)
1	Infosys, Bangalore	1	2,70,000
2	EmeraldHavenRealty Ltd., Chennai (TVS)	1	4,80,000
3	Hinduja Global Solutions, Bangalore	8	1,21,680
4	Focus Academy for Career Enhancement, Coimbatore	2	2,64,000
5	Ultra RMC, Coimbatore	4	1,20,000
6	Milekal Engineering Pvt. Ltd., Hyderabad	5	1,44,000
7	Multitech Associates, Tirupur	1	1,20,000
8	RCI Digital Solutions Pvt. Ltd., Chennai	2	1,50,000
9	Tamilnadu Housing Board (TNHB)	1	2,40,000
10	ASE Structure Design Pvt. Ltd., Chennai	1	1,20,000
11	SG Structural Engineers, Coimbatore	2	1,44,000
12	Vinayaga Constructions, Coimbatore	2	1,20,000
13	Dimensions, Coimbatore	2	1,44,000
14	Kamala Groups, Udumalpet	1	1,20,000
15	Pillar and Pine Pvt. Ltd., Tirupur	1	96,000
16	Byju's, Bengaluru	1	1,000,000
17	Ultracrete, Qatar	1	4,00,000
18	ChitraDevaraj Architects, Hosur	1	1,68,000

## Internship projection – Batch 2015 – 2019

### List of Industries confirmed

S.No	Name of Company & Location	No of Students	Duration(weeks)
1	Adroit Technical Services Pvt. Ltd., Coimbatore	1	12
2	Appaswamy Real Estates Ltd., Chennai	4	12
3	Archess Constructions, Tirupur	1	12
4	Arjun Construction & Infrastructure, Tirupur	3	12
5	ArunExcello Construction LLP, Chennai	4	12
6	CMK Projects (P) Ltd., Chennai	2	12
7	Consulting Civil Engineer & Valuer, Karur	1	12
8	Green Nine Smart Homes, Karur	1	12
9	D'Trend Engineering Consultants, Coimbatore	1	12
10	GR Constructions, Tirupur	4	12
11	Harmony Residences Pvt. Ltd., Chennai	1	12
12	Jain Housing & Constructions Ltd., Coimbatore	2	12
13	Larsen & Toubro Limited, Chennai	1	12
14	Nadhi Information Technologies Pvt. Ltd., Chennai	1	12
15	Rajparis Civil Construction, Chennai	2	12
16	RCI Digital Solutions Pvt. Ltd., Chennai	2	12
17	S. Subrahmanyam Construction Co. (P) Ltd., Chennai	3	12
18	Utracon Structural Systems Pvt. Ltd., Chennai	3	12
19	Walls & Bridges (I) Pvt. Ltd., Hyderabad	1	12

## Professional Society Activities in the Department

Students are provided opportunities to join as members in the professional societies mentioned below:

- **International Society for Technology in Education (ISTE)**
- **American Concrete Institute (ACI)**
- **Indian Concrete Institute (ICI)**
- **American Society of Civil Engineers (ASCE)**
- **Indian Geotechnical Society (IGS)**



One Day workshop on  
"Recent Advances in Geotechnical Engineering"

## Major Research Areas

- Remote Structural Health Monitoring using Impact Echo Method
- Study of Structural Behaviour of Composite beams
- 3D stress analysis of anchorage zone
- Investigation on static behaviour of shear connectors
- Studies on cold formed steel
- Landslide prediction & forecasting using GIS & Remote sensing
- Surface & Subsurface water quality analysis & monitoring

## Industrial Visit details

S.No	Academic Year	Date of Visit	Place of visit	Batch	Course & Year
1	2018-2019	20.09.19	Mullupadi Bridge construction	2015	B.E Civil/IV (68)
2	2018-2019	09.11.19	Skyline Builders, Thrissur	2016	B.E Civil/III (58)
3	2018-2019	06.01.20	Kadaeswari Ready Mix Concrete Plant	2017	B.E Civil/II (62)
4	2018-2019	12.02.19	AccFlyash Bricks Manufacturing, adukkarai	2018	B.E Civil/I (45)
5	2018-2019	16.09.19	Teemage Precast In, kangeyam	2018 & 2019	M.E Structural Engineering / I & II (10& 8)





## Beavers – Department Association

### Office bearers for Academic year 2018 -2019

#### **President:**

*Dr. R. Venkatasubramani,  
Professor and Head,  
Department of Civil Engineering.*

#### **Vice President:**

*Mr. A. Manikandan,  
Assistant Professor,  
Department of Civil Engineering.*

#### **Secretary:**

*Selvan N.R. Monish Vyas Vikram*

#### **Joint Secretary:**

*Selvan P. Rahul*

#### **Chief Executives:**

*Selvi N. Asikapriyadharsini  
SelviM. SaranyaSree*

#### **Event Co-ordinators:**

*SelviS. Monalish  
Selvan K. Pandia Raj*

#### **Executive Members:**

*SelviV, PavithraVarshini  
Selvan K .Manoj  
SelviD. Swathika  
Selvi S. Monalisha  
Selvan. R. Kesavan  
SelvanM.Tamilarasan  
SelvanS. SharanKrish  
SelviR. Kavitha  
SelviK.S. Janani  
SelviP.I Vanathy*

Beavers Association was formed with the primary objective of exposing budding civilians of MCET to the challenges of profession. The Association promotes the talents of students in co-curricular and extracurricular activities and keeps students and staff aware of the modern trends and to function as productive members of the profession and society with an understanding of global ramification of work. The Students of Civil Engineering Department constitute its members. The Members of the association is divided into 15 (A to O) teams and provided the B-Numbers to conduct technical events which would develop the team spirit and have an interaction that promotes innovative ideas, technical tools and thus to spread the benefits of Civil Engineering education.

The association organizes various activities and events to unfold the prospects of Civil Engineering in the present day world. The association provides ample opportunity for the students to improve their presentation skills, organizational skills and leadership qualities, thus gives an opportunity for the overall personality development of students. Our Association conduct beneficial seminars, guest lectures, paper presentations, workshops, technical events and cultural activities that will advocate and promote creative thinking, leadership skills, artistic talents, cooperation and coordination and thus enable the members to function on multi-disciplinary team.

## Details of Programmes organized

S.No	Details of Program	Resources persons	Date
1	Inauguration of BEAVERS Association and Lecture on "Safety Engineering Practice in Engineering"	Dr. A. Sudhakar, Proprietor and Chief Consultant, Dimensions Coimbatore	07/08/2018
2	One day workshop on Challenges in Geotechnical Engineering by IGS student chapter	Prof. P. Anbathagan, Asso. Prof., IISc Bangalore. Prof. S. S. Chandrasekaran, Prof & Head., VIT Vellore.	11/08/2018
3	Seminar on Pre-cast concrete structures in association with ICI student's chapter.	Mr. B. Suresh, All India Technical Head Technical Services. Chettinadu Cements, Chennai	26/09/2018
4	Engineers day celebration and lecture on Recent Challenges for civil engineering practice	In association with Association of ACE civil engineers	05/10/2018
5	Five days FDP on "Ferrocement"	Prof. Paramasivam, NUS, Singapore	22/10/2018
6	Student Talent Enhancement Program (STEP II)	Er. P. Sasokumar, MD, Pragadeesh Construction, CBS Mr. X. John Britto, DGM, Technical Head, Ultra Ready Mix Concrete Alumni: Gowtham (2008 Batch); Karthick (2010 Batch)	22/12/2018

## Events gallery:



Inauguration of BEAVERS Association and Lecture on "Safety Engineering Practive in Engineering"



Five days FDP on "Ferrocement"

## Events gallery:



Student Talent Enhancement Program (STEP II)



Alumni & Industrial Expert Interaction



## ***BEACON - Editorial Team***

### **Staff In charge:**

Mr. S.Dineshkumar  
AP/Civil

### **Student:**

Selvan Shyam Sundar  
II- year B.E Civil