

Faculty of Engineering

AICTE Approved, DST FIST, UGC SAP, TEQIP-III Supported, NIRF Ranked
Brief Profile & Progress Report (2013-2019)





Faculty Programs

Programmes (prior to 2013)

1. B.Tech. (Mechanical, Electrical)
2. M.Tech. – Engineering Systems (FT & PT)
3. Ph.D. - Mechanical Engineering (FT & PT)
4. Ph.D. - Electrical Engineering (FT & PT)

New Programmes (since 2013)

- | | |
|--|------|
| 1. B.Tech. – Civil | 2013 |
| 2. B.Tech. – Footwear | 2014 |
| 3. B.Tech. Part Time – Electrical | 2014 |
| 4. B.Voc. – Renewable Energy | 2015 |
| 5. B.Voc. – Automobile | 2015 |
| 6. B.Voc. – Water, Sanitation & Solid Waste Management | 2015 |
| 7. B.Voc. – Digital Manufacturing | 2018 |
| 8. B.Voc. – AI and Robotics | 2018 |
| 9. M.Voc. – Renewable Energy | 2017 |
| 10. M.Voc. – Automobile | 2017 |
| 11. Modular course – Solar Power Technician | 2016 |



VISION

To become a top teaching-cum-research Faculty through an exemplary system of education leading to entrepreneurship, innovation, quality and values

MISSION

To create an environment for development of students as total quality persons, endowed with super-consciousness, super-intelligence, super-humanity, super-connectivity, sensitivity to values and quality, who will render selfless service in nation building.



Brief Profile

- **Year of Establishment**

- 1950 (Agra University)
- 1981 (DEI)

- **Teaching Staff**

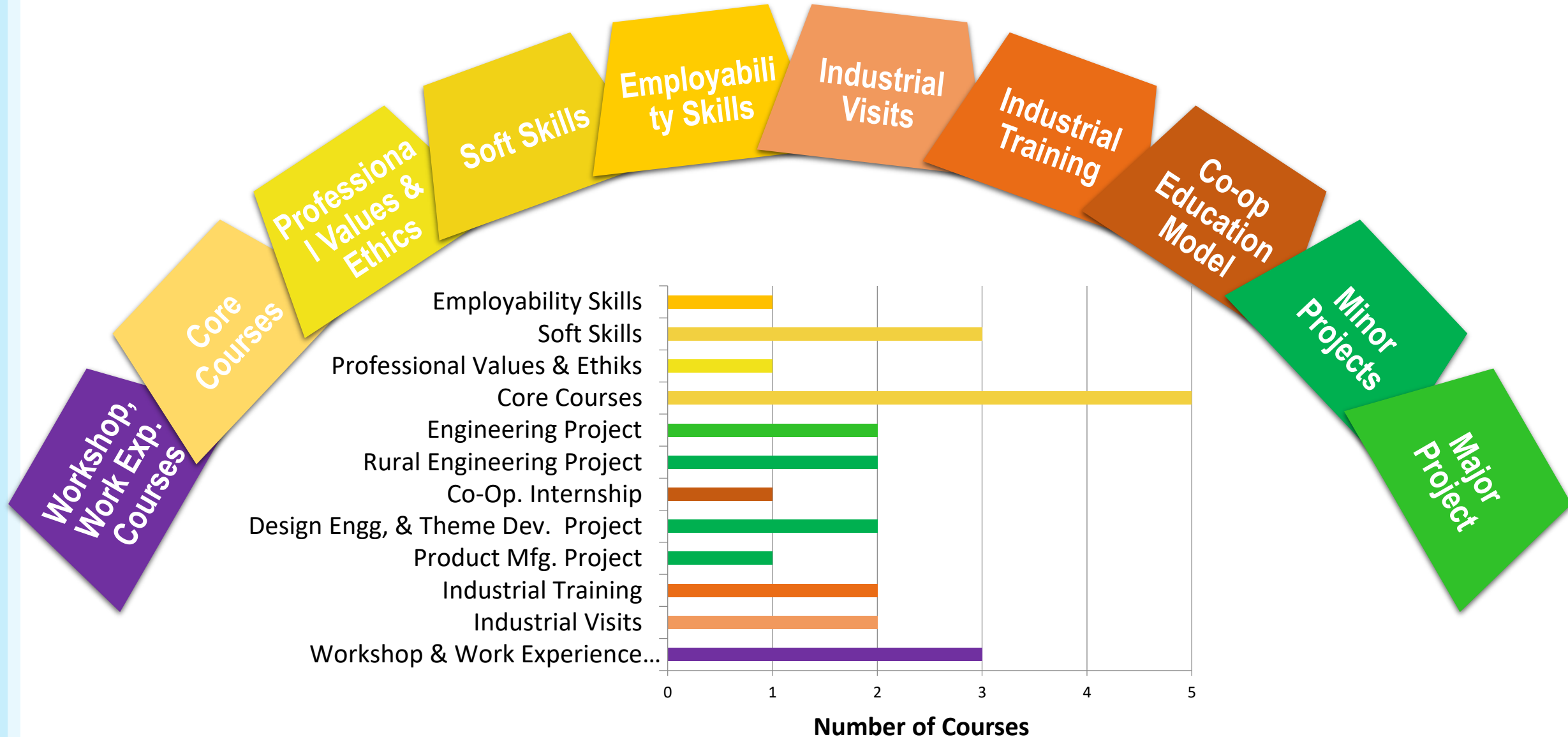
- *All PhDs except 14 pursuing Ph.D.*
- *Attrition Rate: Close to 0%*

Designation	No.
Professors	13
Associate Professors	6
Assistant Professors	26
Emeritus, Adjunct Professors & AICTE-INAE Distinguished Visiting Professor	25
Total	70

- **Non-Teaching Staff** : 70

- **No. of Students (1716)** : **Male: 1313** **Female: 403**
(incl. B.Voc., M.Voc., M.Tech., PT)

Activities with direct bearing on Employability / Entrepreneurship / Skill development



Co-Op Training Partners



HONDA



MARUTI SUZUKI



TATA MOTORS



NEW HOLLAND



A Navratna CPSE



Societal Contributions

Nation Building

- B.Voc. Courses, Skill Development Certificate Courses and Training Programs
- Supernumerary seats - **Prime Ministers Special Scholarship Scheme (PMSSS)** to J&K Students
- Development of Virtual Labs
- Conferences and Workshops





Societal Contributions

Contribution to the Vision of DEI

A major focus of DEI is upliftment of the disadvantaged in society

- **Education and Development Initiatives in Remote Villages across India**
- **Rural and Social Service, Ethics and Value based courses**
- **Community Outreach Program by Departments**
 - A. Solar Agriculture Farm
 - B. Installation of Solar Systems
 - C. Smart City Project
 - D. Audit Reports and Project Reports for Various Initiatives



Value Systems and Etiquettes

Moral and Spiritual Development

- Learning Enrichment Workshops
- Compulsory core courses on Comparative Study of Religions, Indian culture, etc. for all UG Students
- Extra curricular courses on languages, soft skills, etc.



Value Systems and Etiquettes

Underprivileged Sections

- Active contribution in the Microsoft Harisal Project under Digital Village initiative of Government of Maharashtra
- Educational, social and development activities at
 - A. Rajaborari, Madhya Pradesh
 - B. Murar, Bihar
 - C. Kurnool, Andhra Pradesh
 - D. MTV Puram, Tamil Naduetc.



Infrastructure

Living Laboratories

- There are a number of living laboratories in the Engineering Faculty
 - Solar Power Plants – B.Voc. RE courses
 - Construction Materials Testing – Civil Engineering Labs
 - Mechanical testing of materials – Mechanical Engineering Labs
 - Electrical Testing – Electrical Engineering Labs



Student Support

- Earn while you Learn – PG and Research students who do not get scholarship are provided facilities to earn by taking up assistantships, etc.
- GATE coaching + fees, Employability skills programs, Financial support during training and projects, etc.

NIRF POINTERS THAT HIGHLIGHT FACULTY OF ENGINEERING DEI DAYALBAGH

Pointer	IIT Madras 2019	DEI 2019	DEI 2018	Remarks
FSR (out of 30)	30.00	30.00	30.00	DEI is in position 1 along with IIT Madras in Faculty Student Ratio (FSR)
FQE (out of 20)	18.34	16.24	16.46	DEI is comparable to IITM in Faculty Qualification and Experience (FQE)
GPHE (out of 40)	32.05	25.49	29.43	DEI is comparable to IIT Madras in Metric for Placement, Higher Education and Entrepreneurship (GPHE)
GUE (out of 15)	15.00	15.00	15.00	DEI is in position 1 along with IIT Madras in Metric for University Examinations
WD (out of 30)	13.72	22.63	22.30	DEI is in better position than IIT Madras in Women Diversity

Future Plans

1. *Lay emphasis on Innovation, Incubation and Entrepreneurship* and frugal innovation anchored in the principle of achieving more with less.
2. *To germinate a number of Significant Start-ups in Engineering.*
3. **Providing opportunities to the students to complete Education with Job.**
4. To obtain NBA Accreditation for 3 departments by 2020.
5. To increase R&D Presence with national and international collaborations through **Active MoUs with institutions of higher learning.**



THANK YOU





Work Based Training

Name of the Course	Course Code	No of Courses	Level	Details
Workshop Practice	MEM104 MEM204	2	I Year	Hands-On Experience and learning of various machining and manufacturing processes
Industrial Training	EGC 382 EGC 582	2	I, II Year	Visit to Industries for Practical knowledge of industry operations
Work Experience Courses	XEW4XX	1	II Year	Hands on experience on various fields of engineering
Product Mfg. Project	EGC 381	1	II Year	Development of products by the students involving acquired skills in subjects, labs and workshops
Design Engg, & Theme Dev. Project	EGC 581/681	2	III Year	Concepts of System & Design methodologies are applied for a viable project design
Co-Op. Internship	EGC 781	1	III Year	Mandatory internship of students in industries projects and industrial operations for five month duration with stipend.
Rural Engineering Project	RDC781/ RDC881	2	IV Year	Students undertake project related to establishment of any small scale industries (Augmented by a theory Course)
Engineering Project		2	IV Year	Students undertake project work in different areas of specialization under a supervisor.

Research Innovations at FOM

1. Quantum Computing
2. Renewable Energy Initiative (DST, Indo-Norway)
3. Soft Computing
4. Agile and Lean Manufacturing
5. Bulk Nano-materials (PATENT - 3D ECAP DIE)
6. 3D Printing (Entrepreneurship , 11 Generations)
7. Virtual Labs
8. AI and Robotics

International Research MoUs



1. University of Waterloo, Canada



2. Michigan State University, USA



3. Kiel, Germany



National Research MoUs and Collaborations



Institute Collaborations

1. IIT, Delhi

MOUs under Pipeline

1. IIT, Roorkee
2. IIT, BHU

Collaborations with Industries

1. Mitsubishi Electric
2. BHEL





Rural and Social Service Courses

Name of the Course	Course Code	Level	Details
Agricultural Operations	RDC181 RDC281	I, II Year	Hands on experience with agricultural tools and activities
Social Service	RDC182 RDC282	I Year	Life-training for imparting a sense of one-ness, collective responsibility and service to the nation at large
Village Industries & Entrepreneurship	RDC681	III Year	
Rural Engineering Project	RDC781/ RDC881	IV Year	Students undertake project related to establishment of any small scale industries (Augmented by a theory Course)



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3. Research, Innovation and Extension

Publications Profile

- Journals: 128 (2013-2018)
- and (Book, Conf. Proc): 168 (2013-2018)

Research Chapters

- Journals: 112 (2013-2018)

Workshops and Seminars

- National Conferences/Workshops/Seminars: 17

(2 Seminars by Uthirakudi Campus, 16 Seminars by AVIT, Hyderabad)

(1 Workshop by AVIT, Hyderabad)

(1 Workshop by Bannari Venkateswara)

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Research, Innovation and Extension

Projects and Grants

Projects Completed: 10 (2013-2018)

Number of Projects Completed: 10 (2013-2018)

Funding Agencies: 10 (2013-2018)

Major Funding: 10 (2013-2018)

Consultancy

Consultancy: 10 (2013-2018)

Major Consultancy: 10 (2013-2018)

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Infrastructure and Learning Resources

New Facilities/Books/Major Equipment Added

- Structural Analysis Laboratory
- Self-Instructional Laboratory
- Computer Technology Laboratory
- Computer Aided Design (CAD)
- Self-Instructional Laboratory
- Computer Aided Design (CAD)
- Computer Aided Design (CAD)
- Computer Aided Design (CAD)

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Student Support and Progression

Our students have scored more than 99 percentile in GATE – 2017, 2018, 2019

During 2018 and 2019 our students have found a place among 50 Civil Engineering students selected across the country by the L&T Exam, in which,

Placement:

Batch Year	Participated	Students Placed
2016-17	59	30
2017-18	60	15
2018-19	60	18

Companies: L&T, TCS, Everest Industries, Head Strong, HCL Tech., Torrent Power Agra, PNC, mSupply, SunSure, Prism Cement, Tata Projects

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Future Plan of Action

Vision – 2025

S. No.	Important Milestones	Timeline
1.	NAAC Accreditation	2020
2.	ISO 9001:2015 Certification	2020
3.	ISO 14001:2015 Certification	2022
4.	1st Star Rating	2020
5.	National Recognition in Green	2025

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