DHAANISH AHMED COLLEGE ENGINEERING CHENNAI

ELECTRICAL AND ELECTRONICS ENGINEERING

HANDBOOK 2016

DEPARTMENT PROFILE:

The B.E., EEE program at DACE started in the year 2002 with intake of 60 prepares students with a broad foundation in fundamental principles of Mathematics, Science, and Engineering, and the ability to apply this knowledge to the design, analysis, and implementation of real-life complex systems. Students build on this foundation throughout their program of study by engaging in experiential learning in order to gain a hands-on experience in applying classroom concepts in the real world. A final year project provides the students the opportunity to work in multi-disciplinary teams to pursue an engineering idea from conception to design. DACE electrical engineering graduates are trained to understand the broad social, economic, and ethical implications of their work, and to be cognizant of their professional responsibilities.

VISION:

To mould young and fresh minds into well-disciplined and knowledgeable engineers to excel in the field of electrical and electronics engineering to cater the industrial/societal needs.

MISSION:

To produce employable engineers with academic excellence and technical skills compounded with ethical principles that would be able to fulfill expectation of Industries

Vision and Mission are published and disseminated in Staff Room, Department Library, Notice boards and Department Laboratories.

SHORT TERM GOALS:

- Aim for university ranks
- To achieve and sustain 90-100% placement
- To encourage all the students to take part in co-curricular and extra-curricular activities
- To provide consultancy through mini projects for industries in and around Chennai
- Establish interaction with industries through guest lectures, in-plant training and consultancy projects
- To establish Center of Excellence in identified thrust areas

STUDENT INTAKE:

S.No.	YEAR	BRANCH	SANCTIONED STRENGTH	STUDENTS ADMITTED
1	2015 – 16	EEE	60	39
2	2014-15	EEE	60	41
3	2013 - 14	EEE	60	29
4	2012 - 13	EEE	60	39

FACULTY STRENGTH:

- **DOCTORATES** **01**
- **Pursuing Ph.D.** **02**
- **Post-Graduates** **08**

Total Number of Faculty **12**

TEACHING FACULTY:

Sl.No	First Name	Designation
1	Dr. Vanithamani	Professor
2	A.Saravanan	Associate Professor & HOD
3	K.Rajeswari	Associate Professor
4	M.Shagarbanu	Assistant Professor
5	M.Shadhik	Assistant Professor
6	M.Deepak	Assistant Professor
7	N.Vijayalakshmi	Assistant Professor
8	K.Sampath	Assistant Professor
9	K.Venkateshwari	Assistant Professor
10	K.Babu	Assistant Professor
11	Y.B.Kishore Kumar	Assistant Professor
12	Sushma Rani	Assistant Professor

STAFF CADRE RATIO:

NO OF PROFESSOR -01

NO OF ASSOCIATE. PROF. -02

NO. OF ASSISTANT. PROF. -10

TECHNICAL MANPOWER SUPPORT IN THE DEPARTMENT:

Sl.No	Name of the technical staff	Designation (pay-scale)
1	R.Arun sankar	Lab Assistant
2	Sundarrajan	Lab instructor
3	Nandakumar	Lab Assistant
4	Madhan Kumar	Lab instructor

NO OF NON TEACHING STAFF - 04

FACILTIES:

- Classrooms equipped with adequate lighting and fan facilities
- Classroom with LCD/ OHP projectors
- Smart Class Room available for conduct of seminar, value added course and workshop
- Exclusive library for EEE department
- Individual cabins for all the faculty members
- Wifi Enabled department
- Internet facilities
- Fully equipped Laboratories
- Awards for students performing well in curricular and co-curricular activities

LABORATORIES:

<table>
<tr><td colspan="2">Electrical Machines Lab</td></tr>
<tr><td>  </td><td>Objective:

Rectifier Unit, AC&DC distribution panel, DC & AC motors, Transformers and Various types of loads.</td></tr>
<tr><td colspan="2">Power Electronics Lab</td></tr>
<tr><td>  </td><td>SCR Characteristics, TRIAC Phase Control, IGBT characteristics, Voltage commutated Chopper, Resonant converter trainer, MOSFET based step up - step down chopper,IGBT based single phase PWM inverter module.</td></tr>
<tr><td colspan="2">Control and Instrumentation Lab System Lab</td></tr>
</table>

	AC&DC Servo Motor, , Stepper Motor Controller& PID Controller DC & AC Bridges, Transducers, A/D & D/A converter, Flow Measurement trainer kit
Power System Simulation Lab 	Pentium –IV system, Mi-Power software
Engineering practices lab 	Megger, Energy meter, Tubelights, Ironbox, Switches, Fan&Regulator

INDUSTRIAL VISIT:

Sl/No	Academic Year	Class	No of Visits	Company Name
1.	2015-16	II EEE	3	• Ennore Thermal power station • Transformer bay • Sriperumbudur grid
		III EEE	3	• North Thermal power station • Guindy transformer repair bay • Sunguvarchatram SCADA Center
		IV EEE	1	• Kerala electrical &ailied engg.co.ltd

INTERSHIP TRAINING PROGRAM:

Sl/No	Academic Year	Class	No of Students	Company Name
1.	**2015-16**	**IV EEE**	**5**	**Bose electricals**

PROFESSIONAL SOCIETIES:

Professional Membership: ISTE, IEEE, EESA

Following programs are organised under professional society membership,

- Technical Fest
- Workshop
- Technical Talk
- Seminar
- Guest Lecture
- Project Presentation
- Paper Presentation

FDP / Workshop - Faculty

S.No	TOPIC	Event	Date	Organized	Target Audience
1.	MI POWER Training Program	Technical Work Shop	27-05-2015	Mr.A.Saravanan HOD-EEE	Faculty of EEE
2.	MagNet Software Training Program	Technical Work Shop	27-11-2015	Mr.A.Saravanan HOD-EEE	Faculty of EEE
3.	Design Of Electrical Machines	FDP	27-11-2015	Mrs.K.Rajeswari	Faculty of EEE

GUEST LECTURE/ SEMINAR- STUDENTS:

S.No	TOPIC	Event	Date	Resource Person	Target Audience
1.	Recent Trends in Power Quality	Guest Lecture	20.08.2015	Hassan Mydin Manager power Quality solutions-Inphase	IV & III EEE
2.	VLSI and PCB design	Technical Seminar	05.03.2016	SHANTHI.N LIVEWIRE Technologies (CADD)	II & III EEE

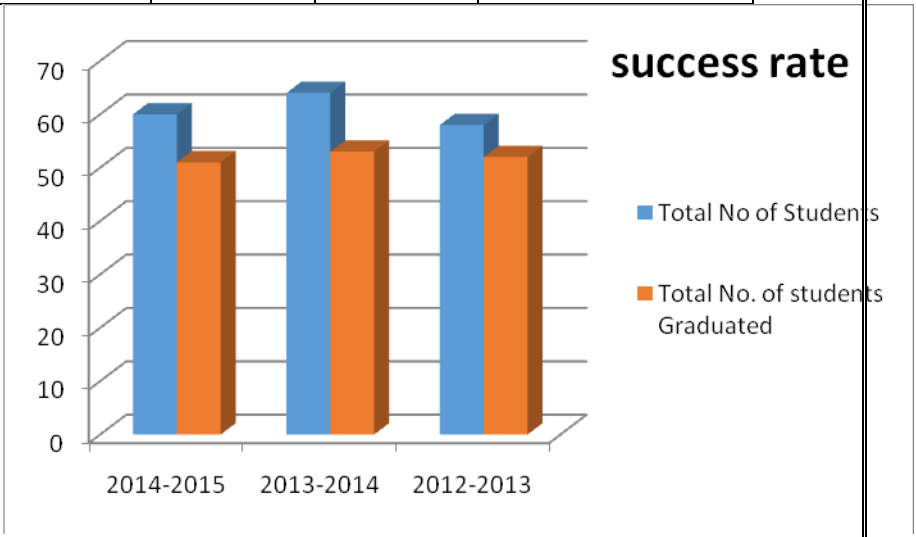
S.No	TOPIC	Event	Date	Organized	Target Audience
1.	MATLAB Training Program	Training Program		Mrs Rajeswari Associate Prof/EEE	III EEE
2.	MI POWER	Training Progra		Mr.A.Saravanan	IV EEE

	Training Program	m		HOD-EEE	

ACADEMIC RESULTS:

GRADUATED STATUS:

Sl. No	Academic Year	Total No of Students	Total No. of students Graduated
1	2014-2015	60	51
2	2013-2014	64	53
3	2012-2013	58	52



DEPARTMENT DISTINGUISHING ACHIEVEMENT:

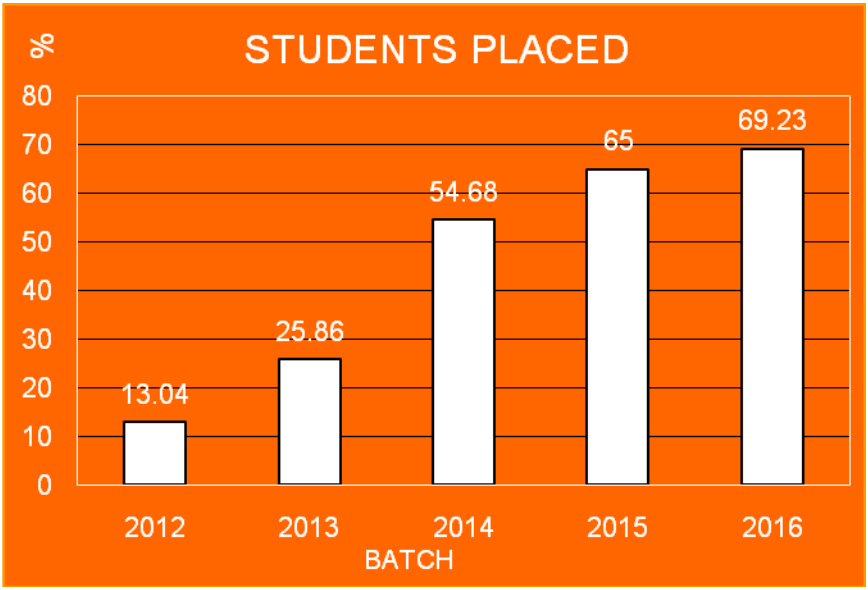
- University Ranks
- Permanent Affiliation from Anna University
- Received Teaching awards in engineering from Staffordshire university and education matters.
- The percentage of pass is increasing year by year.
- placements are increasing year by year.

TRAINING PROGRAM FOR STUDENTS:

Sl.No	Nature of Event	Title of the Event	Participants
1.	Training Program	Quantitative aptitude training	IV EEE Students
2.	Soft Skill Training	C,C++	II EEE
3.	Training Program	Personality Development Coaching	IV EEE
4.	Value Added Course	Testing and Commissioning	IV EEE
5.	Training Program	Cadd center	III EEE
6.	Training Program	BEC (British English Certificate) Training	II EEE

PLACEMENT RECORD

S.No.	Batch	Percentage of Placement
1	2015-16	69.23%
2	2014-15	65%
3	2013-14	54.68%



STUDENT PROJECT:

A project expo 2016 was organized on 27.03.2016 in this three projects has been selected as best projects of our dept based on the criteria reviewed by the committe.

1. Utilization of free energy from the street light to improve the efficiency of the solar panel by using MPPT algorithm
2. Generation Of Electric Power For Marine Application Using Motor Shaft Coupling Mechanism
3. Modeling Of Electric Energy Harvesting For Improving Efficiency Using Wind Mill

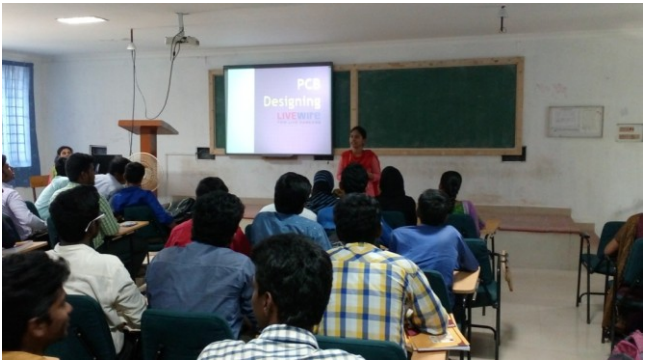
TEACHING LEARNING PROCESS:

- Interactive sessions
- Bringing various instruments, tools, various charts to class rooms for better understanding of students
- Playing videos of various processes, which enhance students understanding
- Taking students to laboratories to demonstrate the working principles of machineries during the class
- Seminars and web-based assignments

LONG TERM GOAL:

- MoU with more organizations to establish research & consultancy activities
- To establish Centers of Excellence in Electrical Engineering
- To interact with National Laboratories for funded projects and research
- To establish world class laboratories and to provide high quality education and training


InPhase
Hasan Mydin J
Power Quality Solutions


PCB
Designing