# NIELIT Aurangabad Brochure BTech (Electronics System Engineering)



National Institute of Electronics & Information Technology Aurangabad

Dr. BAM University campus Aurangabad (Maharashtra)431004

## Introduction

The CEDT Aurangabad was established by Ministry of Electronics and Information Technology (MeitY), Government of India in the year 1986 to promote Electronics Design and Technology. This Institution is currently known as National Institute of Electronics & Information Technology (NIELIT). NIELIT Aurangabad has currently earned its brand value both in Academic and Industry sector for its academic programme offered. The center is Located in the sprawling and lush green campus of the Dr. Babasaheb Ambedkar Marthwada University and possesses state-of-the-art infrastructure including well equipped laboratories, workshops and gymnasium. The Centre is providing world-class educational and skill development opportunities to the youth through state-of-the-art teaching methodologies in both Formal and Non Formal sectors. The institute is known for providing Design Consultancy, Product Development & Technical support services of to the Indian industry

## Location and Accessibility:

Aurangabad is located in Central Maharashtra and has always been a prominent region on the Deccan Plateau. Having been inhabited since the stone age, it has a long artistic and cultural history with various monuments like Bibi a (replica of Taj Mahal), Panchakki, Daulatabad Fort (Second Capital of the Delhi Sultanate), Tomb of Mughal Emperor "Aurangajeb" and Aurangabad Caves, etc..Apart from these, the city is surrounded with world heritage sites like Ajanta (101 km) and Ellora (27 km), holy places like Paithan (60km) and Shirdi (120km). The industrial area of the city has developedrapidly and was the fastest growing industrial city. Aurangabad, about 388 km north- east of Mumbai, has Airport and Railway Station and is connected to Mumbai and New Delhi by Air and Rail. Pune isabout 230 km and is well connected by road to all major cities. The institute, having a beautiful building of 12,200 square meters (1,31,272 sqft) on 18.65 acres of hill side land, is located within the campus of Dr. B. A. M University at a distance of 05 km from the Central Bus Stand and 8 km from the Railway Station.

#### **B.Tech Course:**

The AICTE approved B.Tech (Electronics System Engineering) offered by the center is uniquely designed taking into account latest industrial trends and requirements for churning out highly skilled Engineers. The essentials of Electronic Systems Engineering are dealt in core subjects and others as electives. The course is retrofitted with interdisciplinary field issues such as requirements engineering, industrial design, product engineering, ergonomics, aesthetics, System-level packaging, thermal design, reliability, EMI&EMC, testing & evaluation, maintainability, Serviceability necessary for successful system development, design, implementation and ultimate disposal after decommission. The core modules of Electronic Systems Engineering stream focuses on integration of analog & digital electronics hardware and software, computers, and communication technologies to varieties of systems such as embedded systems, instrumentation and control, consumer electronics, telecommunications, and power and energy etc. to innovate tomorrow's intelligent electronic products and systems today. Degree is awarded by Dr. B.A.M. University.

## Objective of the Course:

The objective of the course is to groom Engineers to engage in lifelong learning, and adopt to changing professional and societal needs through the project oriented teaching approach. This course offers a range of topics of immediate relevance to industry and makes the students exactly suitable for industries engaged in Electronics Product development.

#### **COURSE OUTCOME:**

Students of our institute are qualified and highly skilled Engineers with in-depth knowledge about designing and managing complete electronic system over their life cycles.

#### Salient Features Of The Course:

Practical oriented quality education with emphasis on design and project work.

State of art laboratories where students turn their projects into product.

Students can work on the latest instruments and tools currently used in Industries.

Equal attention on extra-curricular activities.

Institute provides job oriented training including soft-skill development

Good employment and self employment opportunities.

PCB lab having PCB design software, PCB fabrication & Assembly setup & SMD facility to design & fabricate the PCB of their Product.

## Placement & Industry Interaction:

Some of our recruiters are: Videocon, Tata Steel, Varroc, Trimax, Rucha Engineering Ltd., Starion Ltd., Bharat Iron Sindicate Ltd., Bosch, Sterlite, IT Cubes.
Indian Army

#### Other Amenities:

Seminar Hall, Conference Hall with Video conferencing, Auditorium.

LAN with 100 (100 Mbps) Nodes, (NKN Connectivity), Smart Virtual Class rooms, National Digital Library & E-Journal accesses, Online Access to IEEE Journals, Learning Resources- 307, Books, Bound volumes and Journals etc., Volley Ball, Basketball, Kho-kho, Sports grounds, Guest House, Cafeteria, Boys' Hostel, Mess, Jogging Track, Gymnasium, Vehicle Parking.

#### Recreational & Extra Curricular Activities:

We lays great emphasis on holistic development of students. The Institute provides a range of opportunities outside the classroom as well - be it industry interaction for project work, cultural activities, sports competitions, entrepreneurial pursuits, socially relevant activities through NSS etc.

Institute is having well equipped Gym, large green spaces, jogging track, Football/Hockey, Cricket, Volleyball, Badminton and Basket ball etc. Institute also organizes Foundation day Program, Poster Presentation, Science Day, Ganpati Mahotsav, Sport competitions, Debate ,Essay writing, Paper Reading Competitions, Group Discussion Competitions, Tech Fest celebration, Hindi Pakhwada etc.

"ELE-CHROME2K17" celebrated at NIELIT Aurangabad from 22 March to 24 March 2017





On the occasion of National Science Day, the 28<sup>th</sup> February 2017 grand celebration was held at NIELIT Aurangabad

We offers students opportunities to interact with and learn from corporate professionals, Leaders of the business, representatives of government and non-government organizations, artists and intellectuals regularly visit our campus on invitation to deliver talks and presentations that provide insights to the careers and personal attributes of these role-models





The Library of the NIELIT Aurangabad is a continuous growing organism and Its core objective is to support learners, researchers and scientists with its well managed information resources housed in two floors of the library with a total area of 331 Sq.metre. The library has a rich collection of resources in the form of books, journals, ejournals, theses and other documents covering major subject areas like Electronics, Computer Science, Embedded systems, Bioinformatics, Information Security, E-Learning, Agriculture, Bio technology, Control Engineering, Networking, Communication, etc. The collection is organized according to the Dewey Decimal Classification scheme. Open access system is followed in the library. The library is computerized using the software, SOUL developed by INFLIBNET.

Library Resources; Books: 13119, E-books: Subscribed at Books 24\* 7

E Journals: Science Direct, IEEExplore Digital Library, ASTM Digital Library etc

#### Laboratories:

Embedded system Lab, Electronics and Communication Lab, Product Design, PCB Design, Fabrication & SMD, Agri Instrumentation & Process control Lab., T & M Lab., Power Electronics Lab., Opto Electronics Lab., Consumer Electronics Lab., CAD/ CAM Lab., Workshop., Computer Center, Software Development Lab., Networking & IT Security Lab., Research Lab., Information Science (Library)





# Industry Services:

Product Design & Development
Product Engineering
Process Automation
Service & Maintenance
Consultancy in Technology
Incubation & Absorption and
Equipment Procurement

Name	Designation	Educational Qualification	Experience		
Dr. Sanjeev Kumar Gupta	Executive Director ; Scientist/Engineer 'F'	BTech,MS	20 years of R&D Design, Engineering in industry and Post graduate teaching		
S.T. Valunjkar	Dean (formal Programs) ; Scientist/Engineer 'E'	B.E, M. Tech.	33 years of R&D, PE industry & post graduate teaching		
P.T. Sasidharan	Dean (Non-formal Programs); Scientist/Enginee r 'E'	B. Tech, ME.	24 years of R&D industry & post graduate teaching		
Gera Sasikumar	Head of CAD/CAM, Scientist/Engineer 'E'	B. Tech, M. Tech.	23 years in industrial consultancy & post graduate teaching in CAD/CAM/Mechanical Engineering		
Y.P. Gogia	Head of ICT, Scientist/Engineer 'D'	M. Sc, M. Tech.	27 years in R&D and post graduate teaching		
Warsha .Kandlikar	M.Tech Co-ordinator, Scientist/Engineer 'C'	B.E, ME	26 years of Post graduate & undergraduate teaching		
D.S. Raje	Scientist/Engineer 'C'	B.E.	26 years of Teaching		
Lakshman	Head of MCC Scientist/Engineer 'C'	B.E,ME	10 years of R&D, post graduate & undergraduate teaching		
V. S. Jahagirdar	Senior Tech. Officer	M. Tech (EDT)	27 years of Post graduate & undergraduate teaching		
A.K Joshi	B. Tech/DEPM Coordinator Principal Tech. Officer	M.Sc. Physics	30 years of undergraduate teaching		
Sunil K. Singh T	Principal Tech. Officer	B.E (ECE)	27 years of undergraduate teaching		

Jagdish Prasad Sanawale	Deputy Director	B.E (ECE)	20 years of undergraduate teaching	
Y A KHAN	Principal Programmer	M.C.A	28 years of Teaching	
Saurabh Bansod	Scientist-B	B. Tech, M Tech	2 years of teaching experience	
Manish Kumar singh	Scientific Technical assistant	B. Tech ECE		
Sagar Jha	Scientific Technical assistant	B. Tech ECE		
Pooja Patil	Sr. Project Faculty	B.E., M Tech (CSE)	3 years in IT company and teaching	
Sneha Nakhade	Sr. Project Faculty	B.E., M Tech (CSE)	3 years in IT company and teaching	

# **Technical Support Faculty**

P.D.Bharne	Pr TechOfficer	DEDE(E&T)	28 years in PCB designing
K.S. Choudhary	Sr TechOfficer	BCA	22 years in IP Network
M. S. Kshirsagar	Sr TechOfficer	DIE (Indl. Elect)	29 years Computer Hardware & Microprocessor
M. L. Garud	Sr TechOfficer	DIEE (Indl. Elect	28 years in Power Electronics
Balasaheb .B. Sorte	Sr. Technical Officer	DCSM/DME	27 years of Industry & Teaching Experience
S. G. Wankhede	TechOfficer	DEPM	29 years in Consumer Electronics lab
S. R. Jape	TechOfficer	B. F. A. (App. Art)	28 years In fine arts and Product Design
M. Mahto	Sr Tech Assistant	DEE (Elect. Engg.)	26 years In Test and measurement lab
M. K. Kulkarni	TechOfficer(WS)	ITI (Fitter)	27 years in Mechanical Work Shop
R. N. Potbhare	TechOfficer (WS)	ITI (Welder)	21 years in Mechanical Work Shop
S. S. Paropkari	Sr. Electrician	ITI (electrician)	29 years in Power Electronics Lab

# B.Tech. Fee-Structure, Academic year (2017-18) Admission

		1st Sem.			
SI.		Fees & Deposit	2nd Sem.		
No.	Particulars	(Rs.)	Fees (Rs.)		
1	Tuition Fee	34000	34000		
2	Caution Deposit *	1250	-		
	Sub Total	35250	34000		
Boy's Hostel Accommodation					
3	Hostel Fee per Sem. ( 5 months)	8250	8250		

4	Hostel Deposit* 2500		-	
5	Mess Fee per Sem. (5 months)	12500	12500	
	Sub Total 23250		20750	
Othe	ther Fees			
	Particulars	Fees (Rs.)		
	Backlog Exam Fee per sem (along with junio			
6	settings )	400		
7	Backlog Exam Fee per paper (with separate exam setting)		1000	

<sup>\*</sup>Deposits are onetime payment and returnable on completion of the course subject to NIELIT rules.

Note: SC/ST students are exempted from Tuition Fee(SCST/TSP Scheme). Back log Exam Fee is applicable to all students appearing Back log Exams. There shall be an increase up to 10% in (Sl. No 1,3 & 5) in every academic year.

# B.Tech. Lateral entry Fee-Structure, Academic year (2017-18) Admission

		3 <sup>rd</sup> Sem.		
SI.		Fees & Deposit	4 <sup>th</sup> Sem.	
No.	Particulars	(Rs.)	Fees (Rs.)	
1	Tuition Fee	33500	33500	
2	Caution Deposit *	1250	-	
	Sub Total	34750	33500	
Boy's	Boy's Hostel Accommodation			
3	Hostel Fee per Sem. ( 5 months)	8250	8250	
4	Hostel Deposit∗	2500	-	
5	Mess Fee per Sem. (5 months)	12500	12500	
	Sub Total 23250		20750	
Other Fees				
	Particulars	Fees (Rs.)		
	Backlog Exam Fee per sem. (along with junio			
6	settings )		400	

7	Backlog Exam Fee per paper (with separate exam setting)	1000
	Final Year Project fee( 2500Rs with VII & 2500Rs with VIII sem.	
8	Tuition Fee)	5000

<sup>\*</sup>Deposits are onetime payment and returnable on completion of the course subject to NIELIT rules.

Note: SC/ST students are exempted from Tuition Fee(SCST/TSP Scheme). Back log Exam Fee is applicable to all students appearing Back log Exams. There shall be an increase up to 10% in (Sl. No 1,3 & 5) in every academic year.

#### Financial Assistance

Scheduled Caste & Tribe students are exempted from paying Tuition fee & Examination fee in all semesters only once (i.e. repetition of exam/semester due to any reason the fee is not exempted) under the scheme of Scheduled Caste Sub Plan (SCSP) and Tribal Sub Plan (TSP) of Deity,Gol. For fee exemption necessary certificate as per GOI order to be produced from time to time. We encourage students to apply for scholarship from different organisations as per Government rules and regulations

# **Industry Interaction:**

The institute is also providing the services like product design & development, product engineering, proto-type development, process automation, consultancy, etc. to industries. The institute is also making all efforts to create best infrastructure to provide quality services to industry in servicing and maintenance of sophisticated instruments / machines, support in technology absorption and procurement of latest equipment/ machines.

### **Projects and Consultancy:**

Post Graduate level academic projects are of one (01) year duration, whereas Diploma level projects are of one (01) semester (six months) duration. Graduate level mini project is in the 5th semester and final year projects is in 6th and 7th semester along with other academic works. Students are encouraged to interact with industry to expose them to industry environment and motivated to undertake real problems of industry as their innovative project work, guided by the faculty. In addition to above, the institute also undertakes Government as well as industry sponsored projects. Some of them are "Training of Teachers in e-learning", "Women Empowerment through Value Added Skill Development in IECT". Apart from above, the consultancy is also provided to the industry. List of recent project undertaken by the centre from various ministries is given below

#### **Selection Process**

1 Total seats are 60 for I year candidates. Selection will be done through Central Seat allocation Board(CSAB) mnit Jaipur Rajasthan. Students are advised to see website of josaa.nic.in,CSAB17 & www.nielit.gov.in/aurangabad for latest updation.

General/Open	OPPwD	OBC	OBCPwD	SC	ST	Total
29	01	15	01	09	05	60

<sup>2</sup> Student studying abroad can also take admission through DASA. There is a separate quota of 9 seats for such candidates.

3 Three Year Diploma Passed candidate of allied Electronics Branches are eligible for Lateral Entry

(Direct Second Year) in B.Tech. Twelve seats plus—any vacant seats are available for these candidates. The selection will be on the basis of merit and/or—Entrance examination. Reservation will be as per Government of India rules. The Application fees will be Rs. 500/-. However the candidates belonging to SC/ST/PWD are exempted from application fees.

Registration starts from: 01st May to 1<sup>st</sup> July,

Tentative Date for Selection Test:

10 July, 2017

Tentative Course Commencement: 1st August

For Further details contact:

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