# INFORMATION BROCHURE



Centre for Continuing Education INDIAN INSTITUTE OF SCIENCE

Bengaluru - 560 012 Website: http://cce.iisc.ac.in

## **About IISc**

The Indian Institute of Science (IISc) established in 1909, is a Deemed University and is one of the Centrally Funded Technical Institutions, functioning under the Department of Higher Education, Ministry of Human Resource Development, Government of India. The Institute is the oldest and the finest Centre of its kind in India, pursues excellence in research and education in several fields of Science and Engineering.

The Institute started functioning in 1911 and completed 107 years of glorious existence. Bharath Rathna Sir C V Raman, Padma Bhushan Homi Bhabha, Padma Vibhushan Vikram Sarabhai, GN Ramachandran - FRS, Padma Vibhushan S Dhawan, Padma Bhushan S Ramaseshan, Bharath Rathna C N R Rao, Padma Vibhushan R Chidambaram and Padma Vibhushan R Narasimha, Padmasri & Padmabhushan P Balaram are renowned faculty of the Institute. This Institute has a very high international rating in the academic world, and provides facilities for undergraduate education in basic sciences/post-graduate research and advanced instruction in several important and emerging areas of Science and Engineering. The Institute also provides one of the best computing facilities in the country. The vast beautiful green wooded campus, in which more than forty academic Departments and Centres are located, provides a stimulating environment.

#### About CCE

The Centre for Continuing Education (CCE) was established in the year 1975-76 to meet the primary objectives of continuing education to the incumbents of Universities, Research & Development (R&D) Laboratories and Industries, by utilizing the resources of Institute. The courses are suitably designed to meet the requirements of different target groups, ranging from High School Teachers to Research Scientists/Engineers to enable graduate engineers/scientists to grow into competent and creative managers of technology intensive and data driven organizations. The CCE has rapidly grown in range and depth of its activities.

In recent times, India is emerging as one of the global hubs of technology intensive organisations and R&D. Technology-based and R&D intensive industries need executives with exposure and training in Technology.

To nurture and transform dynamic engineers and scientists into competent management researchers who contribute to society, formal continuing education courses suitably designed by the CCE strengthen the capability of these executives to perform robust analyses, and help make decisions in information and data driven organisations to the greater extent.

The CCE has the responsibility for evolving appropriate teaching norms, providing the facilities for auxiliary educational services, conducting workshops, designing courses, organizing tests and examinations, and issuing appropriate gradingcertificatestotheparticipant-studentsin accordancewithInstitutenorms.

- **(a) Management of CCE:** The Director, as the Chief Academic and Administrative Officer of the Institute, has overall responsibility for the direction of the activities of CCE. An 'Advisory Committee' advises and monitors the activities of the CCE. The Chairman of CCE reports to the Director and is responsible for the day-to-day work. Various programmes like Quality Improvement Programme (QIP), Curriculum Development Cell (CDC), PROFICIENCE, Extension Courses etc. have faculty members designated as Co-ordinators.
- **(b) Mode of Operation:** CCE co-ordinates the various continuing education programmes with the concerned departments and sponsoring agencies, and provides necessary assistance and infrastructure support to faculty members organizing the programmes. Nature of support required by each Programme Coordinator varies in accordance with the content and context of the particular programme. CCE is well equipped with sophisticated class rooms, audio video recording facilities, assorted audio-visual equipment's, etc. Laboratory facilities existing in the departments organizing the particular programmes are also utilized. Limited laboratory facilities in such areas as microprocessors have also been setup to specifically cater to the needs of hands on experience in some of the programmes conducted outside the normal Institute working hours.
- **(c) Funding:** CCE strives to make its activities self-supporting. Sponsoring agencies provide necessary funds for organizing programmes initiated by them. The Institute charges an overhead, in addition to the funds required, on all the self-supporting programmes and programmes sponsored by non-government agencies.

## ACTIVITIES OF THE CENTRE FOR CONTINUING EDUCATION

## 1. PROGRAMMES LEADING TO AWARD OF DEGREES

IISc is one of the nine major centers identifies by All India Council for Technical Education (AICTE) for implementing QIP. IISc is one of the Other centers are the eight IITs. On a rotation basis, the Principal Coordinator is from each center for a term of 2 years. Activities under this programme began at the Institute in 1972-73. With the formal establishment of CCE in 1975-76, QIP was also brought under its purview. Under this programme, teachers from AICTE recognized engineering colleges are offered admission for the ME/M. Tech courses and Ph.D Programme. Admission under this programme is made on the all-India basis. Candidates applying for Ph.D programme should be a full time regular faculty member of degree level engineering college recognized by AICTE, and teaching experience at graduate level being three years period.

Duration of the M.Tech course is two years and Ph.D. programme is three years. Candidates seeking admission to the above courses/programme must forward their application through their respective Institution/Directors of Technical Education (DTE). Applications are invited online during October-November of the corresponding year and are to be sent to the Principal Coordinator's Office. The selected candidate must have the sponsorship of the concerned DTE, agreeing to protect the total emoluments and service of the selected candidate.

AICTE grants scholarships to the admitted students during the deputation period. They are also provided with a contingency grant to cover expenses on books, academic visits and participation in conferences.

Details in Annexure-I

## 2. SHORT-TERMCOURSES

The Centre organizes short-term training and refresher courses for teachers as well as personnel from industries and R & D organizations. These courses are of the following categories:

**(a) Sponsored Courses:** These are sponsored by various government agencies such as AICTE (QIP), University Grant Commission (UGC), Indian Society for Technical Education (ISTE), Department of Science and Technology (DST), etc. for teachers from engineering/ science colleges. The expenses are met out of the funds provided by the sponsoring agencies. Duration of these courses normally are of one/two weeks, and are conducted during the working hours of the Institute, the intent is to expose the teachers to the latest development in the frontier areas. Proposals for organizing these programmes are invited every year from

the faculty members. Normally, 10-15 courses of this kind are organized each year, average participation of 20 persons in each course. Nearly 60% of these courses are sponsored under QIP.

Details in Annexure-II

**(b) Self-supporting Courses:** The Centre promotes various refresher/ extension programmes, which are usually held for the participation of scientists and engineers working in different organizations/ industries to update their knowledge. These are either offered by an individual faculty member or a group of faculty members of the Institute and are normally held on the Institute campus, for a period of two to four weeks. These courses are self-supporting and the required finanse are realized from the participants. The participants are provided with a kit containing course materials such as textbooks, writing pad, pen and Xeroxed materials. In a year, normally 10-15 such courses are organized by various departments with an average participation of 30-40 persons for each course.

Details in Annexure - III & IV

- **(c) Need Based Courses:** Many a time, these courses are offered at the special request of industries and R&D establishments exclusively for their employees to upgrade their knowledge in frontier areas of development. The syllabus for the course is tailored to the need of the industry/R&D Establishments. The faculties of the Institute with experts from the industry, if required, handle the course.
- (d) NPTEL Courses: National Programme on Technology Enhanced Learning (NPTEL), a project funded by the Ministry of Human Resource Development (MHRD), for providing e-learning through online Web and Video courses in Engineering, Sciences, Technology, Management and Humanities. This is a joint initiative by seven IITs and IISc Bengaluru. Other selected premier institutions also act as Associate Partner Institutions. NPTEL is a curriculum building exercise and is directed towards providing learning materials in science and engineering by adhering to the syllabi of All India Council for Technical Education and the slightly modified curricula of major affiliating Universities. It has developed curriculum based video courses and web-based e-courses targeting students and faculty of institutions offering UG engineering programs. CCE issues certificates on behalf of NPTEL for the courses conducted at IISc through NPTEL.
- **(e) GIAN Courses:** Govt. of India approved a new program titled 'Global Initiative of Academic Networks' (GIAN) in Higher Education aimed at tapping the talent pool of scientists and entrepreneurs, internationally, to encourage their engagement with the Institutes of Higher Education

in India, so as to augment the country's existing academic resources, accelerate the pace of quality reform, and elevate India's scientific and technological capacity to global excellence.

GIAN courses are envisaged to achieve the following objectives: To increase participants of reputed international faculty in the Indian academic institutes; provide opportunity to faculty from Indian Universities to interact and share knowledge and teaching skills in cutting edge areas; to provide opportunity to our students to seek knowledge and experience from reputed International faculty; to create avenues for possible collaborative research with the international faculty; to increase participation and presence of international students in the academic Institutes; create opportunity for the students of different Institutes/Universities to interact and learn subjects in niche areas through collaborative learning process; CCEalsotakes upthetask of conducting GIAN courses at IISc wherein all the required infrastructure for smooth conducting of courses are taken care of.

Details in Annexure – V

**(f) Online Courses**: CCE offers online courses in various streams based on the demand from student community. CCE has its own recording studio to record as well as live stream the facilities. Also students who enroll for online courses can watch archived videos whenever it is convenient to them, and it gives more flexibility for students to learn.

## 2. CURRICULUM DEVELOPMENT CELL

The Curriculum Development Cell (CDC), sponsored by the AICTE, Government of India has been functioning at the Institute from 1979. The activities of CDC are co-ordinated by CCE and can be classified as follows:

**(a) Book Writing:** One of the major objectives of CDC is the production of high quality textbooks and monographs by Indian authors. CDC provides financial assistance to authors to cover the costs involved in typing, drafting, and reproduction of a limited number of copies. The authors are encouraged to submit their manuscripts for publication. Faculty members of almost all the departments at the Institute have utilized this facility. While some of the manuscripts have already resulted in publications, others are in various stages of completion. In addition to the Institute faculty, this facility has been extended to a few individuals from other organizations. In addition, CDC encourages the development of suitable audio-visual aids and laboratory demonstration units, which supplement text books.

**(b) Short Term Visitor Programme:** The CDC has been encouraging short-term visits of faculty members from engineering colleges for collaborative work with the Institute faculty. During these visits, they conduct specific experiments or projects recommended by the parent institutions and prepare reports on their investigations. These visits have been found beneficial both to the parent institutions and to the teachers concerned.

## 3. EXTENSION LECTURE PROGRAMME

Extension Lecture Series has been visualized to motivate the young children from schools and colleges to go for higher studies of their choice. By attending these lectures, the students from various socioeconomic backgrounds get a chance to know the past, present and the recent developments in Science, Engineering, Medicine and Technology. The resource persons and faculties from different departments visit to different colleges and deliver these lectures. The lectures are semi-scientific/technical, mainly popular lectures.

With this in view, the Institute, under the Continuing Education Program, has been organizing Extension Lectures by its faculty since 1990 in institutions of higher learning at the technical level, in Engineering and science colleges and in schools, public/cultural organizations, Doordarshan and All India Radio at the popular level.

These lectures are arranged not only in Bengaluru but also in Centres in the entire state of Karnataka and sometimes even outside the state. Even though the majority of these are in English, lectures are also arranged in regional languages like Kannada/Hindi, if specific requests are received. Many of these lectures are supported by demonstration, slides, transparencies and models.

#### 4. CCE-PROFICIENCE

One of the most innovative of the entire continuing education programmes is CCE-PROFICIENCE. This programme is a joint venture between IISc and several professional institutions in Bengaluru. Under this programme, courses are offered during evening hours on areas of current interest. All these courses are normally at post –graduate level. The course contents are regularly upgraded on the basis of feedback from the faculty and participants. Courses are offered in two semesters a year and each course has lectures at the rate of two or three hours per week. Instructors for the courses are mostly IISc faculty. Also, professionals from participating institutions and R&D organizations offer a few courses. Tests and examinations are conducted according to

IISc norms and successful participants are awarded grading certificates.

IISc is the custodian of the academic standards of PROFICIENCE courses. This programme is believed to be the first of its kind in the country. It was started on an experimental basis in 1980 and has proved to be extremely popular and has attracted wide attention in academic and professional circles.

Details in Annexure - VI

# 5. OTHER ACTIVITIES/FACILITIES

**(a) Hoysala House:** CCE runs a guesthouse, named after the famous Hoysala Dynasty, which ruled ancient Karnataka. It has 60 self-contained and fully furnished single rooms, mainly intended for accommodating the participants of the programmes conducted under the auspices of the CCE and invitees to the Institute. However, subject to availability, accommodation is made available to other categories of participants in seminars, symposia and conferences, and persons visiting the Institute for academic work. The Officer-in-Charge, CCE can be contacted for allotment of rooms.



- **(b) Multimedia-Based Instructional Programme:** CCE has its own multimedia classroom that has the facility to record as well as live stream the video lectures to outside world. This facility enables CCE to reach out to maximum number of aspirants as they can watch the lectures sitting at their place.
- **(c) Library:** The library has a modest collection of textbooks. These textbooks are for reference for the participants/students of the courses offered by CCE. Apart from textbooks there is also a collection of course

material/lecture-notes in the library for reference. It is envisaged to expand the library at the center under the auspices of CDC activity.

**(d) Computer Laboratory:** The computing facility at the Centre includes several computer systems that have dual operating system with high specifications, enabling users to use any of their softwares and perform experiments as and when required.



Annexure I - CANDIDATES OFFERED ADVANCE ADMISSION TO (a) Ph.D UNDER QIP 2015-16 (FINAL ADMISSION 2016-17)

Sl. NO	Name of the Candidate	Department
1	Mr.JairajR	ECE
2	Ms.NishaAS	CiE
3	Mr. Vinod	EE
4	Mr. Gladwin Jos K T	ECE
5	Mr. Kiran George Varghese	CPDM
6	Ms. Aysha S	CST

# (b) ME/M.Tech. Under QIP2015-16

Sl. NO	Name of the Candidate	Department
1	Mr. Kiran R	INAP

# Annexure II – QIP Short Term Courses During 2016–17

SI. NO	Title of the Course	Co-ordinator/s
1.	Entrepreneurship for Technology Startups	Dr. Parameshwar P Iyer, MS
2.	Microcontroller Applications	Mr. S. Ramgopal, IN
3.	Design Nuances in Incompressible and Compressible Flow Turbo machines	Dr. Ing. Punit Singh, CST
4.	Engineering Project Management	Dr. Parameshwar P. Iyer, MS
5.	Pulse Width Modulation Techniques for Voltage Source Inverter,	Prof. G. Narayanan, EE
6.	Applications of NMR spectroscopy in Structural and Conformational Analysis,	Prof. Siddartha P Sarma, MBU
7.	Probability and Statistics for Machine Learning	Dr. Ambedkar Dukkipati, CSA
8.	Scanning Electron Microscopy,	Dr. Chandan Srivastava, MT
9.	Recent Advances in UHV Transmission and Distribution	Dr. Subba Reddy B., EE
10.	Numerical Methods for Engineers and Scientists	Dr. Sivaram Ambikasaran, CDS
11.	Modeling and Analyzing Sustainable Transport for Scientific Decision Support	Dr. Ashish Verma, CE
12.	Physical Chemistry	Dr. Anshu Pandey & Dr. Goverdhan P Reddy, SSCU

13.	Graph Theory and Combinatorics	Dr. L Sunil Chandran, CSA
14.	Introduction to Linear Finite Element Analysis	Dr. Debraj Ghosh & Dr. Tejas Murthy, CE
	Seismic Resistant Design of Masonry and Reinforced Concrete Structures,	Dr. K S Nanjunda Rao, CE
	Fundamentals of	Dr. G V Mashesh DESE
17.	Introduction and Application of X – ray Diffraction	Prof. Rajeev Ranjan & Prof. Satyam SuwasMT
	Digital Signal Processing and Applications	Dr. Prasanta Kumar Ghosh, EE
	Advances in Geo-Environmental Engineering,	Prof. G L Sivakumar Babu, CE
		Dr. T V Ramachandra, CES (Due to some unavoidable reasons this could not be conducted)

QIP Short Term Courses during 2017-18

Sl. NO	Title of the Course	Co-ordinator/s
1	Algorithmic Game Theory And Mechanism Design	Prof. Y Narahari and Prof. Siddarth Barman
2	Topics in Control, Operation and Protection of Power Systems	Dr. Gurunath Gurrala & Dr. Sarasji Das
3	Genetic Engineering-Principles & Applications	Dr. N Ravi Sunderesan
4	Solid Mechanics	Prof. C S Jog
5	Applied Optimal Control and State Estimation	Prof. Radhakanth Padhi
6	Electron Microscopy	Prof. Chandan Srivastava

7	Non Linear and Adaptive Control Design	Prof. Radhakanth Padhi
8	Introduction to Iron making	Prof. Govind S Gupta
9	Condition Monitoring, Diagnostics & Testing of High Voltage Apparatus	Dr. Subba Reddy B
10	Real-Time Simulation for Power Electronics and Power Systems	Prof. G Narayanan and Dr. Gurunath Gurrala
11	Protein Structure And Design	Dr. Mahavir Singh
12	Transport Process	Prof. V Kumaran
13	Mathematical methods and Solid State Physics	Prof. Anindya Das
14	Digital Signal Processing and Applications	Dr. Prasant Kumar Ghosh
15	X-Ray Crystallography Basics and Applications	Dr. M Nethaji

# AnnexureIII-InternetBasedCourse During 2016-17

Sl. NO	Title of the Course	Co-ordinator/s
1	Internet Based Course on "Environmental Management"	Dr. T V Ramachandra (CES)

# Annexure – IV – Self Supporting Short Term Courses During 2016-17

Sl. NO	Title of the Course	Co-ordinator/s
1.	Orientation towards Learning & Research at Bagalkot	Prof. K B Akhilesh (MS)

2.	Technology Management for Defence Institute of Advanced Technology (DIAT)	Prof. K B Akhilesh (MS)
3.	Combustion of Solid Fuels and Chemkin at CMCRI, Gujarat	Prof.S.Dasappa, CST
4.	Training Programme on Electronics System Packing	Mr.G.V.Mahesh, DESE
5.	Missile Guidance for National Technical Research Organisation (NTRO), Bengaluru	Prof.Debasish Ghose, AE
6.	Non-linear Adaptive Optimal and Embedded Control	Prof.Radhakant Padhi, AE
7.	Surge Analysis and Design Protection System	Dr.P.Raghuveer Rao, Civil Engg.

Self-Supporting Short Term Courses during 2017-18

Sen supporting short rerin courses during 2017 10		
Sl. No	Name of the Course	Name of the Co-ordinator & Dept
1.	Short term course on "Advance flow cuytrometry"	Dr. William Rasican Surin , MCB
2.	CCE-Short term course on "Aeroacoustics – Introduction"	Dr. Arnab Samanta, AE
3.	CCE-Training Programme on technology management for DIAT, Pune	Prof. K B Akhilesh, MS
4.	CCE-Short term course on Management of Intellectual property rights	Dr. P P Iyer, MS
5.	CCE training programme on "Surge Analysis and Design of Surge Protection Systems"	Dr. P Raghuveer Rao, CiE
6.	CCE training programme on "Investigations and Engineering Tests for Dams"	Prof. Jyant Kumar, CiE
7.	CCE training programme on "Design Flood estimation and Reservoir Operations"	Prof. V V Srinivas

8.	CCE training programme on "Seepage Analysis and Controlling at Dams"	Prof. T G Sitharam, CiE
9.	CCE training programme on "Comprehensive Health and Safety assessment and rehabilitation of Embankment dams"	Prof. T G Sitharam, CiE
10.	CCE training programme on "New Materials for Rehabilitation of Dams"	Prof. G L Sivakumar Babu & Prof. J M Chandra Kishen

# AnnexureV-GIANCourse During 2016-17

Sl. NO	Title of the Course	Co-ordinator/s
1	"Process Metallurgy For 2016 AndBeyond"	Prof. T A Abhinandan
2	Basics and Application of Phase Field Modelling in Materials Science	Prof. Abhik N Choudhury
3	Molecular View for Polymer Rheology	Prof. Suryasarathi Bose

**During 2017-18** 

Sl. NO	Title of the Course	Co-ordinator/s
1	"Atomization and Sprays in gas turbine applications"	Prof. Saptarishi Basu
2	"New Approaches in Tuberculosis research and drug development"	Prof. Amit Singh
3	"Kinetics and Modeling of Ironmaking Blast Furnace"	Prof. Govind S Gupta

# (a) January-May 2016

Sl. No.	Name of the Course	Faculty
1	Innovative Product Development and Design Methods	Dr. J E Diwakar & Prof.P AchuthaRao
2	Linear FiniteElement Method	Prof. P C Pandey (Retd.)
3	Introduction to Artificial Intelligence and Applications	Dr. H K Anasuya Devi
4	Analysis and Design of Composite Structures	Dr. G Narayana Naik
5	Data Mining	Dr. V Susheela Devi
7	Embedded System Design using Microcontrollers	Mr. M Krishna Kumar (Retd.)
8	Introduction to Numerical Grid Generation&FluidFlow Computations	Dr.PSKulkarni
9	Vibration and Noise Control in Engineering Structures and Systems	Dr.S B Kandagal
10	BasicSpectroscopyand Instrumentation	Dr. S Sandya
11	Transgenic Technology: Principles andApplications	Dr. N Ravi Sundaresan
13	Basics of Finite Element Analysis	Dr. R Vidya Sagar
14	1D&2DNMRSpectroscopy: Applications in Structure Biology	Dr. S Raghothama
15	Structural Analysis and Design Optimization of Engineering Structures and Systems	Dr.S B Kandagal
16	Advances in Genetic Engineering	Dr. N Ravi Sundaresan
17	Basics of Data Analytics	Dr. Gopal Krishna Sharma Dr. Badarinath Ambati
19	Nonlinear Finite Element Method	Prof. P C Pandey (Retd.)

20	Programming and Hardware Interfacing DSP TMS 320c6713	Mr. M Krishna Kumar (Retd.) Dr. M R Arulalan
21	Software Project Management	Dr.Gopal Krishna Sharma & Dr. Badarinath Ambati

# (b) August December 2016

Sl. No.	Name of the Course	Faculty
1.	Innovative Product Development and Design Methods	Dr. J E Diwakar (Retd.) IISc. & Prof. P. Achutha Rao
2.	Introduction to Artificial Intelligence and Applications	Dr. H K Anasuya Devi
3.	Photovoltaic Science and Technology	Mr. Kuruvilla Varghese & Dr. Saji Salkalachen
4.	Project Management	Dr. Parameshwar P. Iyer
5.	Data Mining	Dr. V Susheela Devi
6.	High Voltage Engineering	Dr. Joy Thomas M
7.	Basic Spectroscopy and Instrumentation	Dr. S Sandhya
8.	Introduction to Numerical Grid Generation & Fluid Flow Computations	Dr. P S Kulkarni
9.	Vibration and Noise Control in Engineering Structures and Systems	Dr. S B Kandagal
10.	Analysis and Design of Composite Structures	Dr. G Narayana Naik
11.	Structural Analysis & Design Optimization of Engineering Structures & Systems	Dr. S B Kandagal
12.	Advances in Genetic Engineering & Transgenic Technology	Dr. N Ravi Sundaresan
13.	Basics of Data Analytics	Dr. Gopal Krishna Sharma & Dr. Badarinath Ambati
14.	Embedded System Design using Microcontrollers	Mr. M Krishna Kumar (Retd.) IISc.
15.	Nonlinear Finite Element	Prof. P C Pandey (Retd.) IISc.

	Method	
16.	Operations Research	Dr. Gopal Krishna Sharma & Dr. Badarinath Ambati
17.	Performance Modeling and Simulation	Prof. Shalabh Bhatnagar
18.	Python Programming	Ms. Annapoornima Koopad & Dr. Parameshwar P Iyer
19.	Strategic Management	Dr. Parameshwar P. Iyer

# (c) January - May 2017

Sl. No.	Name of the Course	Faculty
1.	Innovative Product Development and Design Methods	Dr. J E Diwakar (Retd.) IISc. & Prof. P. Achutha Rao
2.	Introduction to Artificial Intelligence and Applications	Dr. G Narayana Naik & Dr. H K Anasuya Devi
3.	Project Management	Dr. Parameshwar P Iyer
4.	Renewable Energy Resources: Principles, Technology and Utilization	Mr. Kuruvilla Varghese & Dr. Saji Salkalachen
5.	Service Design Thinking	Dr. J E Diwakar (Retd.) IISc, Prof. P. Achutha Rao, & Prof. TVP Chowdry
6.	Strategic Management	Dr. Parameshwar P Iyer
7.	Introduction to Numerical Grid Generation & Fluid Flow Computations	Dr. P S Kulkarni
8.	Vibration and Noise Control in Engineering Structures and Systems	Dr. S B Kandagal
9.	Machine Learning of Sensory Signals	Dr. Sri Ram Ganapathy
10.	Neural Networks for Signal Processing -1	Dr. Shayan Srinivasa Garani
11.	Industrial Internet of Things (IIoT)	Mr. Ganesh Shankar
12.	Structural Analysis & Design Optimization of Engineering Structures & Systems	Dr. S B Kandagal

13.	Basic Concepts of Finite Element Method	Prof. P C Pandey (Retd.) IISc.
14.	Basics of Data Analytics	Dr. Gopal Krishna Sharma & Dr. Badarinath Ambati
15.	Basic Level French Language	Prof. M S Mohan Kumar & Ms. Namratha Nagaraj
16.	Performance Modeling and Simulation	Prof. Shalabh Bhatnagar
17.	Smart Design Methods and Processes in Automotive Industry	Prof. Anindya Deb & Mr. Kalyan Kumar
18.	Wireless LANS Concepts, Installation, Troubleshooting and Testing	Mrs. Anandi Giridharan & Mr. Chetan Kumar

(d) August - December 2017

_	(u) August - December 2017		
Sl. No.	Name of the Course	Faculty	
1.	Analog Integrated Circuits	Dr. Hardik J. Pandya	
2.	Innovative Product Development and Design Methods	Prof. P Achutha Rao & Dr. J E Diwakar	
3.	Data Mining	Dr. V Susheela Devi	
4.	Vibration and Noise Control in Engineering Structures and Systems	Dr. S B Kandagal	
5.	Service Design Thinking	Dr. J E Diwakar, Prof. P Achutha Rao & Prof. T V P Chowdry	
6.	Embedded System on ARM Platform	Mr. M Krishna Kumar	
7.	Analysis and Design of Composite Structures	Dr. G Narayana Naik	
8.	Structural Analysis and Design Optimization of Engineering Structures and Systems	Dr. S B Kandagal	
9.	Basics of Data Analytics	Dr. Gopal Krishna Sharma, Dr. Badarinath Ambati & Prof. M Sekhar	
10.	DSP Algorithms, Architecture and Applications	Mr. M Krishna Kumar	
11.	Nonlinear Finite Element Method	Prof. P C Pandey	

12.	Strategic Management	Prof. R Srinivasan
13.	Basic French Course	Prof. Mohan Kumar M S and Ms. Namratha Nagraj
14.	Basic Concepts of Finite Element Method	Prof. P C Pandey
15.	Principles and Applications in Genetic Engineering	Dr. N Ravi Sunderesan
16.	Basics of Data Analytics Second Batch	Dr. Gopal Krishna Sharma, Dr. Badarinath Ambati and Prof. M Sekhar



## Contact us:

For further information, you may contact the following address:

## Chairman

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