ignou
THE PEOPLE'S
UNIVERSITY

REGULAR FLEXI-TIME M.TECH PROGRAMMES OF

INDIRA GANDHI NATIONAL OPEN UNIVERSITY
(IGNOU)

Offered at

IGNOU Centre of Excellence

Rajagiri Valley, Kakkanad, Cochin - 682 039.

ignou
THE PEOPLE'S
UNIVERSITY

**M.Tech in
Embedded System Design (ESD)**

&

**M.Tech in
Information Systems Security (ISS)**

Curriculum review in Embedded System Design by experts from IISc.Bangalore, NIT Trichy, representatives from Wipro, Nest, experts from IGNOU and RECT.

Curriculum review in Information Systems Security by experts from IIT Madras, experts from NIT Calicut, experts from IGNOU and RECT.

IGNOU One Day Workshop on Embedded System Design

IGNOU One Day Workshop on Advances on Information Systems Security

1. TARGET GROUP

The course is targeting the following people:

1. People working in the industry. Those who want to upgrade their value by learning more and adding to their qualifications.
2. Teachers from engineering colleges. Those who want to have proper qualification for a PG degree and who can spare some time in the evening for the course while continuing the regular work.
3. Freshers, who are out of the college after a qualifying degree for the programme but want to study more and equip themselves.

2. PROGRAMME STRUCTURE

The programme is organized into two years. However it is flexible enough and those who cannot take the full load of the course, may take lesser number of credits/course and complete the course in more than two years. One has to complete the course in a maximum time of five years. Every semester, one has to take at least six credits other than the project. After the successful completion of the project in the fourth semester, the candidate will be awarded with **regular Masters Degree in Technology by IGNOU.**

The semester runs from January to June and July to December. University examinations will be conducted in the months of June and December of the corresponding semester.

Attendance requirement in the class is 75% to appear for the University written examination.

The marks awarded for each course will have an internal assessment and written components. 40% of marks will be from internal assessment and 60% will be from the written examination. Internal assessment marks will be awarded based on the tests and assignments. There will be 50% minimum requirement in university written examination and internal assessment separately for a pass.

3. CLASS TIMINGS

Classes will be in flexi timings in the evenings on week days, and on Saturdays.

4. FEE STRUCTURE & NUMBER OF SEATS

Programme fee per credit is Rs. 4000/- and the maximum programme fee per semester is Rs 58,000/-. The number of seats are limited to 30 for each programme.

5. SELECTION

Based on the performance during Written Test/ Technical/Personal interview. Weightage will be given for marks in the qualifying exam and for experience.

6. HOSTEL FACILITIES AND TRANSPORT

Hostel facilities will be provided in the campus for both boys and girls.

Transport facilities will be available from the campus to Palarivattom via Kakkanad after the class.

7. HOW TO APPLY

Application forms can be obtained from IGNOU Centre of Excellence at Rajagiri Valley, Kakkanad or from IGNOU Regional Office at Kaloor on payment of Rs. 300/-. Alternatively forms can be downloaded from the website www.rectignou.co.in. Completed application form with a DD of Rs.300/- towards the application fee drawn in favour of *Secretary, RECT* payable at Ernakulam should reach "The Course Coordinator, IGNOU Centre of Excellence, M.Tech programs, Rajagiri Valley P.O., Kakkanad – 682039" on or before *23rd July, 2011*.

I. M.Tech. in EMBEDDED SYSTEM DESIGN

ELIGIBILITY CRITERIA

Admission to the programme is open to all with prescribed qualifications. Candidates without working experience are also permitted for the programme. Admission to Post Graduate Program in "Embedded System Design" is open to candidates with any one of the following or equivalent degrees from a recognized University with minimum 60% marks.

BE / B.Tech – Electronics & Communication, Electrical & Electronics, Applied Electronics and Instrumentation. M.Sc in Electronics / M.Sc. in Physics.

SCHEME

The following is the scheme for first to third semesters of M Tech programme. The 4th semester is completely spared for project work.

Semester I

Sl. No.	Title	Core/Elective	Credits	Marks
1	1D and 2D Digital Signal Processing	C	3	100
2	Embedded System-I	C	3	100
3	Electromagnetic Interference and Compatibility in System Design	C	3	100
4	Data Communication and Computer Networks	C	3	100
5	Embedded Systems Lab	C	4	100
		Total	16	500

Semester II

Sl. No.	Title	Core/Elective	Credits	Marks
1	Embedded Systems – II	C	3	100
2	FPGA Based System Design	C	3	100
3	Embedded System Software in "C"	C	3	100
4	Elective I	E	3	100
5	Elective II	E	3	100
		Total	15	500

Elective I, Elective II (Any two from the below list)

Mathematics II
Cortex
Advanced Digital Signal Processing
Mobile Communications

Semester III

Sl. No.	Title	Core/Elective	Credits	Marks
1	Embedded System Interfacing	C	3	100
2	Elective III	E	3	100
3	Elective IV	E	3	100
4	Elective V	E	3	100
5	Project & Viva Voce	C	2	100
		Total	14	500

Electives III, IV & V (Any three from the below list)

CAD of Digital Systems
Error Control Coding
Cryptography and network security
Data Compression
Speech Processing
Digital Signal Processors
Multimedia Systems

Semester IV

Sl. No.	Title	Core/Elective	Credits	Marks
1	Project & Viva Voce	C	13	500
		Total	13	

II. M.Tech. in INFORMATION SYSTEMS SECURITY

ELIGIBILITY CRITERIA

Admission to Post Graduate Programme in "Information Systems Security" is open to candidates with any one of the following degrees from a recognized University with minimum 60% marks.

BE / B.Tech. – Computer Science and Information Science / Technology / M.Sc. Computer Science, Information Science / MCA / BE/B.Tech. in any branch of Engineering and Technology with relevant experience / M.Sc. in Electronics / Physics / Statistics / Mathematics with relevant experience.

SCHEME

The following is the syllabi for first four semesters of M. Tech. programme.

Semester I

Sl. No.	Title	Core/Elective	Credits	Marks
1	Information Processing Infrastructure	C	4	100
2	Cryptography for Information Security	C	4	100
3	Mathematical foundation for Information Security	C	4	100
4	Internet and Web Technologies	C	4	100
		Total	16	400

Semester II

Sl. No.	Title	Core/Elective	Credits	Marks
1	Network Security Architecture	C	4	100
2	Operating System Security	C	4	100
3	Web and Database Security	C	4	100
4	Operating System Security Lab	C	2	100
5	Web and Database Security Lab	C	2	100
		Total	16	500

Semester III

Sl. No.	Title	Core/Elective	Credits	Marks
1	Information Security Planning and Management Standards	C	4	100
2	Elective I	E	3	100
3	Elective II	E	3	100
4	Project I	C	6	200
		Total	16	500

Semester IV

Sl. No.	Title	Core/Elective	Credits	Marks
1	Elective III	E	3	100
2	Project II	C	12	400
		Total	15	500

LIST OF ELECTIVES

Sl. No.	Title	Credits
1	Cyber Law and IPR	3
2	Emerging Security Technologies	3
3	Cyber Forensics and electronic frauds	3
4	Wireless Security	3
5	Security in distributed environment	3
6	Digital Defense	3
7	Identity Management	3
8	Quantum Cryptography	3
9	Security in service enterprises	3
10	Data Structures and Algorithms	3

RECOGNITION

IGNOU is a CENTRAL UNIVERSITY established by an Act of Parliament in 1985 (Act No. 50 of 1985) IGNOU Degrees/Diplomas/Certificates are recognised by all the members of the Association of Indian University (AIU) and are at par with Degrees/Diplomas/Certificates of all Indian Universities/Deemed Universities/Institutions vide UGC Cicular No. F.1-8/92 (CPP) dated February 1992 and AIU Circular No. EV/B (449)/94/176915-177115 dated January, 1994.

IMPORTANT DATES

1.	Issue of application form begins	: 14th July 2011
2.	Last date for receipt of filled-in application	: 23rd July 2011
3.	Publication of merit list for test/interview	: 27th July 2011
4.	Date of test / interview	: 2nd August 2011
5.	Admission begins	: 6th August 2011
6.	Classes begins	: 10th August 2011

Contact at IGNOU Regional Centre & IGNOU Centre of Excellence Campus

The Regional Director
IGNOU Regional Centre,
Kochi, Kaloor, Kerala-682 017
Ph: +91-484-2348189/2340203
Fax: +91-484-2340204
Email: igrc14@vsnl.net
Website: www.ignou.ac.in

The Course Co-ordinator
IGNOU Centre of Excellence, M.Tech. Programmes
Rajagiri Valley P.O., Kakkanad
Kochi-682 039
Phone: 0484-2427835/2428238
Fax: +91-484-2426241
E-mail: ignoupg@rajagiritech.ac.in
Website: www.rectignou.co.in