

COMSATS Institute of Information Technology
Registrar Office, Principal Seat, Islamabad

No: CIIT-Reg/Notif-646/12/970

July 3, 2012

NOTIFICATION

Scheme of Studies of Bachelor of Science (BS) in Electronics

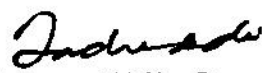
It is hereby notified that the Academic Council in its 13th meeting held on June 04, 2012 approved the following scheme of studies of Bachelor of Science (BS) in Electronics program w.e.f Fall 2012 at CIIT system:

1. Minimum duration:	04 years	
2. Minimum no. of semesters:	08	
3. No. of credit hours in each semester:	17-19	
4. Course work	<u>Min No. of courses</u>	<u>Min No of Credit hours</u>
i. Core courses (List attached)	33	113
ii. Elective courses (List attached)	05	15-20
iii. Institutional elective courses (List attached)	03	09
Total no. of courses of the program:	41	
Total no. of credit hours of the program:		137

Note:

The regulations relating to undergraduate degree programs approved by the competent authority and amended from time to time shall be applicable.

This issue with approval of the Competent Authority.


Nadeem Uddin Qureshi
Additional Registrar

Encl: (4 pages in total including this page)

Distribution:

1. Dean Faculty of Science, CIIT.
2. Chairman, Department of Physics, CIIT.
3. Incharge, CIIT Islamabad Campus.
4. Incharge Academics, CIIT Campuses.
5. All HoDs Department of Physics, CIIT, Campuses.
6. Controller of Examinations, CIIT.
7. Incharge Examinations, CIIT Campuses.

CC:

1. PS to Rector
2. PA to Registrar

List of Core courses

Serial No.	Course Code	Course Title	Cr. Hrs.	Pre-requisite
1.	CSC103	Introduction to Computers and Programming	4(3, 1)	
2.	CSC241	Object Oriented Programming	4(3, 1)	CSC103
3.	EEE223	Signals and Systems	3(3, 0)	PHY221, MTH241
4.	EEE231	Electronics I	4(3, 1)	PHY221
5.	EEE232	Electronics II	4(3, 1)	EEE231
6.	EEE241	Digital Logic Design	4(3, 1)	
7.	EEE324	Digital Signal Processing	4(3, 1)	EEE223
8.	EEE325	Control Systems	4(3, 1)	EEE223
9.	EEE342	Microprocessor Systems and Interfacing	4(3, 1)	EEE241
10.	EEE351	Principles of Communication Systems	4(3, 1)	EEE223
11.	HUM100	English Comprehension and Composition	3(3, 0)	
12.	HUM102	Report Writing Skills	3(3, 0)	HUM100
13.	HUM103	Communication Skills	3(3, 0)	HUM100
14.	HUM110	Islamic Studies	3(3, 0)	
15.	HUM111	Pakistan Studies	3(3, 0)	
16.	HUM4**	Foreign Language	3(3, 0)	
17.	MTH101	Calculus I	3(3, 0)	
18.	MTH102	Calculus II	3(3, 0)	MTH101
19.	MTH231	Linear Algebra	3(3, 0)	
20.	MTH241	Ordinary Differential Equations	3(3, 0)	MTH102
21.	MTH263	Probability Theory and Random Variables	3(3, 0)	
22.	PHY100	Mechanics and Thermodynamics	4(3, 1)	
23.	PHY120	Electricity, Magnetism and Optics	4(3, 1)	
24.	PHY221	Circuit Theory	4(3, 1)	PHY120
25.	PHY229	Modern Physics	4(3, 1)	PHY120
26.	PHY231	Applied Quantum Mechanics	3(3, 0)	PHY229
27.	PHY271	Boundary Value Problems	3(3, 0)	MTH241
28.	PHY324	Electromagnetic Theory	3(3, 0)	PHY120
29.	PHY350	Solid State Physics	3(3, 0)	PHY231
30.	PHY353	Optics and Laser	4(3, 1)	PHY324
31.	PHY425	Microelectronics	3(3, 0)	PHY350
32.	PHY498	Final Year Project Phase I	2(0, 2)	
33.	PHY498	Final Year Project Phase II	4(0, 4)	



List of institutional elective courses

Serial No.	Course Code	Course Title	Credit Hours.	Pre-requisite
1.	ECO102	Economics	3(3, 0)	
2.	ECO200	Introduction to Development Economics	3(3, 0)	ECO102
3.	ECO300	Engineering Economics	3(3, 0)	
4.	HUM200	Business Communication Workshop	3(3, 0)	HUM100
5.	HUM220	Introduction to Psychology	3(3, 0)	
6.	HUM221	International Relations	3(3, 0)	
7.	HUM223	Introduction to Philosophy	3(3, 0)	
8.	HUM310	Islamic History	3(3, 0)	
9.	HUM320	Introduction to Sociology	3(3, 0)	
10.	HUM430	French	3(3, 0)	
11.	HUM431	German	3(3, 0)	
12.	HUM432	Arabic	3(3, 0)	
13.	HUM433	Persian	3(3, 0)	
14.	LAW300	Corporate Law	3(3, 0)	
15.	MGT100	Introduction to Business	3(3, 0)	
16.	MGT101	Introduction to Management	3(3, 0)	
17.	MGT131	Financial Accounting	3(3, 0)	
18.	MGT403	Entrepreneurship	3(3, 0)	MGT101
19.	MGT461	Project Management	3(3, 0)	
20.	MGT463	Productivity and Quality Management	3(3, 0)	MGT101
21.	MGT513	New Product Development	3(3, 0)	

List of Elective courses:

Serial No.	Course Code	Course Title	Cr.Hrs.	Pre-requisite
1.	EEE371	Electric Machines	4(3, 1)	PHY324
2.	EEE446	Real Time Embedded Systems	4(3, 1)	EEE342, PHY324
3.	PHY461	Industrial Automation	3(3, 0)	PHY221
4.	EEE353	Digital Communication Systems	4(3, 1)	EEE351
5.	EEE455	Optical Fiber Communications	3(3, 0)	PHY324
6.	EEE463	Antennas and Radio Wave Propagation	4(3, 1)	PHY324
7.	EEE464	Wireless Communication Systems	3(3, 0)	EEE463
8.	EEE465	Microwave and Satellite Communication Systems	3(3, 0)	EEE351, EEE463
9.	PHY451	Semiconductor Devices	3(3, 0)	PHY350
10.	PHY452	CMOS Technology	3(3, 0)	PHY425
11.	PHY453	Semiconductor Device Design and Simulations	4(3, 1)	PHY425

12.	PHY454	Optoelectronics	3(3, 0)	PHY353
13.	PHY434	VLSI Design	4(3, 1)	EEE232, EEE241
14.	PHY464	Principles of Photonics	3(3, 0)	PHY353
15.	PHY478	Quantum Computing	3(3, 0)	PHY231

Included.