

(Revised Fall 2007)

Fast growing information technology and communication systems have become critical components of almost every company's strategic plan. Companies which want to take advantage of the new information technologies and communication systems require expert professionals, who can apply computer science principles to solve problems produced by the interface between business and technology. This is an undergraduate program where students are exposed to various areas of computer applications including the latest developments in the industry.

Objectives: The course aims at realizing the following student objectives -

- Demonstrating sound knowledge in key areas of computer science or industrial computing.
- Demonstrating a substantial understanding of concepts in key areas of computer science.
- Carrying out the required analysis and synthesis involved in computer systems, information systems and computer applications.
- Demonstrating professional competence in developing software and in its design and implementation
- Developing sound practical skills in order to address problems which arise from computer systems and applications.
- Demonstrating sound presentation and communication skills, which are required in the computer industry.

After completion of the course, students of high academic standard shall be capable of competing for employment in a chosen professional area and pursuing career development in that area.

Eligibility: 10+2 or equivalent / 3 year Diploma from a State Board of Technical Education

Course Fee: Rs.9,200/- per semester inclusive of examination fees or as revised from time to time.

Minimum duration: 3 years (6 semesters)

Maximum duration: 6 years.

Minimum counseling and hands-on experience at Learning Centers: 160 hrs/semester.

Course Structure

First Semester		
Sub.Code	Title	Credit
BC0032	Communication Skills	4
BC0033	Basic Mathematics	4
BC0034	Computer Concepts & C Programming	4
BC0035	Computer Fundamentals	4
BC0036	Digital Systems	4
Total Credits		20

Second Semester		
Sub. Code	Title	Credit
BC0037	Object Oriented Programming using C++	4
BC0038	Data Structures using C	4
BC0039	Discrete Mathematics	4
BC0040	Computer Organization and Architecture	4
BC0041	Fundamentals of Database & Management	4
Total Credits		40

* For the list of approved institutions visit our website <http://dde.smuhmts.edu>

Provision for lateral entry to second semester of BCA

Eligibility:

(a) 10+2 or equivalent / 3 year Diploma from a State Board of Technical Education and six month computer course from a reputed institution*.

OR

(b) 3 year Diploma in IT/CS from a State Board of Technical Education

Additional Fees: In addition to the normal fees, an additional lateral entry fee of Rs. 3,700 /- (including examination fees) is payable by students opting for this scheme.

Note: In this lateral entry scheme, students have to appear and pass the first semester examination. Books of first semester will be supplied by the University and internal assessment will be completed at the Learning Centers.

Third Semester		
Sub. Code	Title	Credit
BC0042	Operating Systems	4
BC0043	Computer Oriented Numerical Methods	4
BC0044	Accounting & Financial Management	4
BC0045	Structured System Analysis & Design	4
BC0046	Microprocessor (8085, 8086 & 8087)	4
Total Credits		60

Fourth Semester		
Sub. Code	Title	Credit
BC0047	Java Programming	4
BC0048	Computer Networks	4
BC0049	Software Engineering	4
BC0050	Oracle & Distributed Databases	4
BC0051	System Software	4
Total Credits		80

Fifth Semester		
Sub. Code	Title	Credit
BC0052	Theory of Computer Science	4
BC0053	VB.Net & XML	4
BC0054	Software Project Management & Quality Assurance	4
BC0055	TCP/IP Protocol Suite	4
BC0056	Unix Operating System	4
Total Credits		100

Sixth Semester		
Sub. Code	Title	Credit
BC0057	Object Oriented Analysis & Design	4
BC0058	Data Warehousing and Data Mining	4
BC0059	Elective*	4
BC0060	Project	8
Total Credits		120

*Elective

BC5901-Artificial Intelligence

OR

BC5902-Image Processing