### Year 2: Semester 1:

**Cores:** (4 Core Courses)

- BIS 2100 Information Systems Security 4
- BIT 2100 Information Systems Development 4
- BIT 2101 Information Systems Management 3
- BIT 2102 Electronic Commerce 4

**Electives:** (-1 Elective Course)

- BIS 2102 Knowledge-based Systems 3
- BIT 2105 Electronic Media Systems and Media 3

### Year 2: Semester 2:

**Cores:** (4 Core Courses)

- BIS 2200 Intelligent Systems 4
- CSC 2202 Systems Analysis and Design 4
- CSC 2203 Database Languages 4
- CSC 2204 Research Design and Implementation 4

**Electives:** (-1 Elective Course)

- BIS 2201 Executive Information Systems 4
- BIS 2202 Selected Topics in Information Systems 4
- CSC 2200 Operating Systems 4

**Year 2: Recess Term:**

- BIS 2301 Industrial Training 4

**Year 3: Semester 1:**

**Cores:** (4 Core Courses)

- BIS 3100 Modeling and Simulation 4
- BIS 3101 Requirements Engineering for Organizational Systems 3
- BIS 3102 Human Computer Interaction 3
- CSC 3107 Database Systems 4

**Electives:** (-1 Elective)

- BIS 3101 Software Engineering 4
- BIS 3103 User Interface Design 4

**Year 3: Semester 2:**

**Cores:** (4 Core Courses)

- BIS 3200 Project in Information Systems 4
- BIS 3201 Strategic Management of Information Systems 3
- BIS 3203 E-Governance 4
- CSC 3209 Computer Networks 4

**Electives:** (-1 Elective)

- BIT 3204 Enterprise Network Management 4
- BIT 3205 Database (DB Programming) 4

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**BACHELOR OF SCIENCE IN SOFTWARE ENGINEERING**

This programme offers a course of study leading to the B.Sc. in Software Engineering. The objectives of the B.Sc. in Software Engineering programme are:

- i. To produce graduates who are well-educated in the fundamental concepts of software engineering and able to continue their professional development throughout their careers. The course combines theory with consideration of its application in software engineering practice.

- ii. To build human resource capacity in the Software engineering discipline in both the public and private sectors to students who wish to become proficient in developing software in a variety of languages, platforms and applications using a methodical approach.

- iii. To produce graduates with good communication skills capable of functioning responsibly in diverse environments and able to work in teams.

- iv. To produce graduates who are innovative and are capable of creating jobs;

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<tr>
<th>Codes</th>
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<tr>
<td>Year 1: Semester 1:</td>
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<td>Cores:-(6 Core Courses)</td>
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<td>CSK 1101 Communication Skills</td>
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<td>BIT 1102 Communication Technology and Internet</td>
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<tr>
<td>BSE 1103 System Analysis And Design</td>
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<td>BSE 1104 Discrete Mathematics</td>
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<td>BSE 1105 Business Law</td>
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### Year 1: Semester 2:
Cores:-(6 Core Courses)
- BSE 1200: Software Development Principles I 4
- CSC 1202: Principles Of Programming I 4
- BSE 1201: Numerical Analysis 3
- CSC 1203: Information Systems 3
- BSE 1205: Introduction to Internet Programming 4
- CSC 1204: Research Methodology 3

Elective S:-(No Elective Course)

### Year 1: Recess Term:
- BSE 1301: Professional Software Engineering Mini Practical Project I 4

### Year 2: Semester 1:
Cores:-(6 Core Courses)
- BSE 2101: Introduction to Database Systems 4
- BSE 2102: Software Development Principles II 4
- BSE 2103: Principles of Programming II 4
- CSC 2100: Algorithms and Data Structures 4
- BSE 2104: Computer Architecture 3
- BSE 2105: Formal Methods 3

### Year 2: Semester 2:
Cores:-(5 Core Courses)
- CSC 2200: System Software 4
- BSE 2201: Network Application Development 4
- BSE 2202: Embedded Systems Software 4
- BSE 2203: Computer Networks and Data communication 4
- BSE 2204: Modeling in Information Systems 4

Electives:- (No Elective Course)

### Year 2: recess Term:
- BSE 2301: Professional Software Engineering Mini Practical Project II 4

### Year 3: Semester 1:
Cores:-(5 Core Courses)
- BSE 3101: IT Projects Management and Development 3

### Year 3: Recess Term:
- BSE 3301: Internship that should leading to Final Year Project 4

### Year 4:Semester 1:
Cores:-(All Core Courses)
- BSE 4301: Software Engineering Project 6
- BSE 4101: Software Reliability and Testing 4
- BSE 4102: Ethics for Professional Engineers 3
- BSE 4103: Entrepreneurship and Business 3

### Year 4:semester 2:
Cores:-(All Core Courses)
- BSE 4301: Software Engineering Project 12
- BSE 4203: Information Technology and Society 3