

**Introduction of the BSSE Program:**

Software Engineering is the discipline of developing and maintaining software systems that behave reliably and efficiently and are affordable to develop and maintain. However, more recently, it has evolved in response to the increased importance of software in safety-critical applications and to the growing impact of large and expensive software systems in a wide range of situations.

Software plays a central and underpinning role in almost all aspects of daily life: communications, government, manufacturing, banking and finance, education, transportation, entertainment, medicine, agriculture, and law. The number, size, and application domains of computer programs have grown dramatically; as a result, huge sums are being spent on software development. Most people's lives and livelihoods depend on this development's effectiveness. Software products help us to be more efficient and productive. They provide information, make us more effective problem solvers, and provide us with safer, flexible, and less confining work, entertainment, and recreation environments.

Software Engineering is the application of a systematic, disciplined, and quantifiable approach to the design, development, operation, and maintenance of software systems. It is in fact the practice of designing and implementing large, reliable, efficient, and economical software by applying the principles and practices of engineering. The department aims to train students in all aspects of software life cycle from specification through analysis and design to testing, maintenance and evolution of software products.

**Program Mission:**

The mission of the Bachelor of Software Engineering program is to prepare technically strong Software Engineers who can contribute effectively towards the nation, society, and the world at large through effective problem-solving skills, application of engineering knowledge, leadership, and a healthy lifelong learning attitude.

**Eligibility Criteria:**

For admission to BSSE, a minimum of 50% marks in Intermediate/12 years schooling/A-Level (HSSC) or Equivalent with Mathematics is required. However, the students who have not studied mathematics at the intermediate level have to pass the deficiency mathematics courses (06 credits) in the first two semesters.

**Duration:**

The minimum duration for completing BSSE is four years. However, the HEC allows a maximum of seven years to complete the BSSE degree.

**Credit Hours:**

Minimum credit hours are 134, including 6 credit hours of the capstone project.

**Award of Degree:**

A minimum 2.0 CGPA (Cumulative Grade Point Average) on a scale of 4.0 is required to be awarded a BSSE Degree.

<b>Areas</b>	<b>Credit Hours</b>	<b>Courses</b>
Computing Core	46	14
Domain Core	18	6
Domain Elective	21	7
Mathematics & Supporting Courses	12	4
Elective Supporting Courses	3	1
General Education Requirement	34	15
<b>Totals</b>	<b>134</b>	<b>47</b>