

<b>Course Name</b>	<b>SOFTWARE ENGINEERING</b>		<b>Course Code</b>	ITEC322		
<b>Credit Hours</b>	3		<b>Contact Hours</b>	<b>Theory</b>	<b>Lab</b>	<b>Total</b>
				2	2	4
<b>Offered as</b>	<input type="checkbox"/> University Requirement <input type="checkbox"/> College Requirement <input checked="" type="checkbox"/> Program Requirement <input checked="" type="checkbox"/> Core <input type="checkbox"/> Elective <input checked="" type="checkbox"/> ITEC <input type="checkbox"/> COMP <input type="checkbox"/> CNET					
<b>Level</b>	5 <sup>th</sup> Level		<b>Prerequisite</b>	NIL		
<b>Course Description:</b> Software engineering is a major branch of computing science that deals with the development of software systems as practical and cost-effective solutions for individuals and society. This course covers the fundamentals of software engineering like software life cycle, requirements engineering, system development paradigm, and system modeling using UML. It also covers software verification & validation, important implementation issues, open-source development, and concepts of software re-engineering. The course has a strong technical relation with graduation project providing the opportunity to practice software engineering knowledge, skills, and practices in a realistic development setting with a real client.						
<b>Course objectives:</b> This course will develop the students' ability to learn: <ul style="list-style-type: none"> <li>• What is software development life cycle (SDLC)?</li> <li>• How to elicit requirements from a client and their classification?</li> <li>• How to use graphical models (UML diagrams) to represent software architecture?</li> <li>• What are the stages of software testing, and its role in V &amp; V?</li> <li>• What rules must follow for Re-engineering?</li> </ul>						
<b>Grading</b>	<input checked="" type="checkbox"/> Mid Exam	15%	<input checked="" type="checkbox"/> Mini Project	15%	<input checked="" type="checkbox"/> Theory Assignment	10%
	<input checked="" type="checkbox"/> Final Theory	40%	<input checked="" type="checkbox"/> Final Lab	10%	<input checked="" type="checkbox"/> Lab Assignment	10%
<b>Text Book:</b> Software Engineering, 10th Edition, 2021, Ian Sommerville, Pearson Education. ISBN: 9780137503148						
<b>Reference Book:</b> R. S. Pressman, Software Engineering: A Practitioners Approach, 9th edition, 2020, McGraw Hill International publication.						