

### Course Syllabus

<b>Course Code and Name</b>	<b>IE 26323 –Engineering Economics</b>
<b>Credit and contact hours</b>	<b>2 (2, 0, 0) (Lecture, Tutorial, Lab)</b>
<b>Required or Elective</b>	<b>Required</b>
<b>Level / Year</b>	<b>Level (6) / Year (3)</b>
<b>Course Prerequisite</b>	-
<b>Textbook</b>	W. G. Sullivan, E. M. Wicks, and C. P. Koelling. Engineering Economy, New York, (16th Edition) 2014.
<b>Course Description</b>	Introduction to engineering economy. Interest formulas and equivalence. Bases for comparison of alternatives. Decision making among alternatives. Evaluating replacement alternatives. Break-even and minimum cost analysis. Cost accounting. Depreciation. Economic analysis of operations. Economic analysis of public projects.
<b>Brief List of Topics to be Covered</b>	<ol style="list-style-type: none"><li>1. Introduction to engineering economy</li><li>2. Foundation of Engineering Economy: Interest (simple &amp; compound), cash flows (CFD), rate of return (ROR)</li><li>3. Factors: How time and interest affect money, combining Factors: Single payment, Uniform Series, Arithmetic Gradient, determination of unknown I &amp; N, Interpolation</li><li>4. Nominal and effective interest rates: Nominal and effective interest and equivalence relations involving payment period and compounding period</li><li>5. Depreciation Methods: SL, SYD, DB, DDB</li><li>6. Tools for the evaluation of alternatives: PW, FW, AW, CC, Payback Period</li><li>7. Effects of Inflation, Evaluation of alternatives adjusted for inflation</li><li>8. Making Decisions on real world. Replacement study &amp; its applications, Break Even Analysis</li></ol>
<b>Course is prerequisite for</b>	-