

<b>SEMESTER</b>	<b>DEPARTMENT</b>	<b>COURSE TITLE</b>
<i>Fourth</i>	<i>General Engineering</i>	<i>Statistics and Probability</i>
<b>COURSE CODE</b>	<b>HOURS 3</b>	<b>COURSE SPECIFICATIONS</b>
<i>EG401</i>	<b>UNITS 3</b>	<i>Theoretical Contents</i>
<p><b>1. Statistics:</b></p> <ul style="list-style-type: none"> <li>➤ Definitions of Statistics and their importance.</li> <li>➤ Scope and Limitations.</li> <li>➤ Sample and populations.</li> </ul>		
<p><b>2. Data:</b></p> <ul style="list-style-type: none"> <li>➤ Collection data.</li> <li>➤ Classification of data.</li> <li>➤ Tabulation and representation of data.</li> </ul>		
<p><b>3. Distributions:</b></p> <ul style="list-style-type: none"> <li>➤ Central tendency.</li> <li>➤ Measures of central tendency.</li> <li>➤ Median and means.</li> <li>➤ Frequency distribution.</li> </ul>		
<p><b>4. Correlations and Regressions:</b></p> <ul style="list-style-type: none"> <li>➤ Normal approximation</li> <li>➤ Simple and rank correlations.</li> <li>➤ Simple regression.</li> </ul>		
<p><b>5. Probability:</b></p> <ul style="list-style-type: none"> <li>➤ Permutations and sample points, combinations.</li> <li>➤ Sample space.</li> <li>➤ Law of probability.</li> <li>➤ Marginal and conditional probability.</li> <li>➤ Random variable.</li> <li>➤ Bernoulli.</li> </ul>		

- Binomial.
- Poison distributions.

**References:**

1. Harold .J. Larson, *Introduction to Probability*, Wesley publishing company, 1995.
2. 1988 , الدار الدولية للنشر والتوزيع ,  الدكتور موارى. ر. شبيجل ,