## Programme Intended Learning Outcomes

<table>
<thead>
<tr>
<th>No.</th>
<th>Learning Outcome</th>
<th>Subjects Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Understand the fundamentals of science and engineering, and have the ability to apply them.</td>
<td>AMA1100*, AMA1102*, AMA1104*, AP10009*, EIE2261*, EIE3399#</td>
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<tr>
<td>2</td>
<td>Conduct experiments, as well as to evaluate the outcomes.</td>
<td>AMA1100*, AMA1102*, AMA1104*, AP10009*, EIE2261*, EIE3399#</td>
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<tr>
<td>3</td>
<td>Analyse and evaluate a system, component or process of given specifications and constraints</td>
<td>AMA1100*, AMA1102*, AMA1104*, AP10009*, EIE2261*, EIE3399#</td>
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<td>4</td>
<td>Identify, formulate and solve problems relevant to EIE.</td>
<td>AMA1100*, AMA1102*, AMA1104*, AP10009*, EIE2261*, EIE3399#</td>
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<tr>
<td>5</td>
<td>Have the ability to use modern engineering/IT tools appropriate to EIE practice.</td>
<td>AMA1100*, AMA1102*, AMA1104*, AP10009*, EIE2261*, EIE3399#</td>
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<td>6</td>
<td>Be able to work with others collaboratively in a team and have a knowledge of leadership.</td>
<td>AMA1100*, AMA1102*, AMA1104*, AP10009*, EIE2261*, EIE3399#</td>
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<td>7</td>
<td>Recognize professional responsibility.</td>
<td>AMA1100*, AMA1102*, AMA1104*, AP10009*, EIE2261*, EIE3399#</td>
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<td>8</td>
<td>Communicate effectively.</td>
<td>AMA1100*, AMA1102*, AMA1104*, AP10009*, EIE2261*, EIE3399#</td>
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<td>9</td>
<td>Recognize the need for life-long learning.</td>
<td>AMA1100*, AMA1102*, AMA1104*, AP10009*, EIE2261*, EIE3399#</td>
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<tr>
<td>10</td>
<td>Be able to participate in creative activities.</td>
<td>AMA1100*, AMA1102*, AMA1104*, AP10009*, EIE2261*, EIE3399#</td>
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</tbody>
</table>

**Note:**
- * Compulsory subject
- # Elective subject
- ✓ Supports this programme intended learning outcome

### EIE Subject Title
- EIE2101 Basic Circuit Analysis
- EIE2103 Basic Electronics
- EIE2104 Introduction to Databases
- EIE2201 Logic Design
- EIE2204 Computer Programming
- EIE2206 Information Technology
- EIE3106 Integrated Project
- EIE3301 Computer System Fundamentals
- EIE3362 Linear Systems
- EIE3373 Microcontroller Systems and Applications
- EIE3375 Object Oriented Design and Engineering
- EIE3381 Communication Fundamentals
- EIE3399 Data Communications

### Servicing Subject Title
- AMA1100 Basic Mathematics - an Introduction to Algebra and Differential Calculus
- AMA1101 Calculus I
- AMA1102 Calculus II
- AMA1103 Introductory Linear Algebra
- AMA1104 Introductory Probability
- AMA2111 Mathematics I
- AP00003 Foundation Physics II
- AP10008 University Physics II
- ENG1003 Freshman Seminar for Engineering
- IC2111 Industrial Centre Training

**Cluster-Area Requirement Subjects**
- CAR - Cluster-Area Requirement Subjects (English) - ELCXXX
- LCR - Language and Communication Requirement Subjects (Chinese) - CBSXXX