

Figure 1 DRAFT

**Proposed Industrial Automation Baccalaureate Degree Curriculum**

Local GE for A.S. Degree	Units
A.1 Oral Communication	3
A.2 Written Communication (ENGL B1a)	3
B.1 Natural Sciences (Physics B2a or higher required) <sup>1</sup>	4
B.2 Mathematics and Logic (Math B1a or higher required) <sup>2</sup>	4
C.1 or C.2 Arts, Literature, Philosophy and Foreign Language	3
D.1 Foundations in Behavioral Science	3
D.2 Foundations in the Social Sciences	3
E. Lifelong Learning	4
<b>Total</b>	<b>27</b>

Lower Division Technical Core	Units
ELET B1 (Basic Electronics)	4
ELET B4 (Computer Integrated Manufacturing)	3
ELET B5 (Programmable Logic Controllers)	3
ELET B55a (Electric Motors - Controls)	3
ELET B56 (Instrumentation and Process Control)	3
ELET B70 (Mechanical Systems)	3
<b>Total</b>	<b>19</b>

Lower Division Electives (Choose 14 units)	Units
ELET B6 (Analog and Digital Electronics)	3
ELET B58 (Advanced Programmable Logic Controllers)	3
ELET B61 (Telecommunications)	3
ELET B62 (Radio Communications)	3
ELET B63 (Electronic Systems Installation)	3
MFGT B1ab (Machine Tool Processes)	3
INDR B12 OR (INDR B10 and B11) (Introduction to Drafting and CAD)	2
INDR B42 (Introduction to Solidworks)	2
INDT B10 (Occupational Readiness)	3
ECON B1 OR B2 (Principles of Economics/Micro or Macro)	3
CHEM B2a (Introductory General Chemistry)	4
ENGR B47 (Introduction to Engineering and Design)	3
ENGR B24 (Engineering Graphics and Descriptive Geometry)	3
BSAD B20 (Introduction to Business)	3
COMM B8 (Small Group Communication)	3

Upper Division General Education	Units
Technical Writing	3
Industrial Organizational Psychology	3
Industrial Ethics	3
<b>Total</b>	<b>9</b>

Upper Division Technical Core	Units
INDT B100 (Industrial Safety Principles and Management)	3
INDR B100a (Industrial Design Graphics I)	3
INDR B100b (Industrial Design Graphics II)	3
INDT B110 (Materials Science for the Technician)	3
INDA B110 (IA Networks)	3
INDA B112 (IA Systems)	3
INDA B114 (IA Measurement)	3
INDA B116 (Industrial Motion Control)	3
INDA B120 (Industry Sector Seminar: Applied Automation)	3
INDA B122 (Industry Sector Seminar: Manufacturing and Production)	3
INDA B124 (Industrial Manufacturing Processes)	3
INDA B130 (Project Management and Budgeting)	3
INDA B132 (Leadership and Entrepreneurship)	3
INDA B134 (Quality Assurance)	3
INDA B135 (Facilities Planning and Operations)	3
INDA B140 (Systems Design and Integration)	3
INDA B141 (Systems Implementation)	3
<b>Total</b>	<b>51</b>

<b>Total Lower Division GE</b>	<b>27</b>
<b>Total Lower Division Technical</b>	<b>19</b>
<b>Total Lower Division Electives</b>	<b>14</b>
<b>Total Upper Division Technical</b>	<b>51</b>
<b>Total Upper Division GE</b>	<b>9</b>
<b>Total Units</b>	<b>120</b>

<sup>1</sup>Or Physics B4a or higher

<sup>2</sup>Or Math B2, Math B6a or higher