

MIDDLESEX COUNTY COLLEGE  
**Division of Professional Studies**  
 The Engineering Technologies Department  
**Associate in Applied Science Degree in Mechanical Engineering Technology**

Sample Two-Year Course of Study

**FRESHMAN YEAR**

<b><u>Semester I</u></b>		<b><u>Credits</u></b>	<b><u>Semester II</u></b>		<b><u>Credits</u></b>
MCT 101	Introduction to Technology <sup>1</sup>	2 ___	MAT 129B	Precalculus Part B <sup>3</sup>	2 ___
MAT 129A	Precalculus Part A <sup>2</sup>	2 ___	ENG 122	English II <sup>7</sup>	3 ___
ENG 121	English Composition I <sup>4</sup>	3 ___	CIT 105	Statics for Technicians <sup>8</sup>	3 ___
ELT 105	Foundations of Electrical & Electronics Technology <sup>5</sup>	4 ___	MEC 125	Advanced Mechanical Drawing/CAD II <sup>9</sup>	3 ___
MEC 123	Technical Graphics/CAD I	3 ___	MEC 130	Manufacturing Process & Materials	3 ___
PED ___	Physical Ed Elective <sup>6</sup>	1 ___			
<b>Total:</b>		<b>15</b>	<b>Total:</b>		<b>14</b>

**SENIOR YEAR**

<b><u>Semester III</u></b>		<b><u>Credits</u></b>	<b><u>Semester IV</u></b>		<b><u>Credits</u></b>
MAT 131A	Analytic Geometry&Calculus I Part A <sup>10</sup>	2 ___	MAT 131B	Analytic Geometry&Calculus I Part B <sup>11</sup>	2 ___
PHY 123	General Physics I <sup>12</sup>	3 ___	PHY 124	General Physics II <sup>15</sup>	3 ___
PHY 125	General Physics I Lab	1 ___	PHY 126	General Physics II Lab	1 ___
CIT 203	Strength of Materials <sup>13</sup>	4 ___	MEC 204	Fluid Mechanics <sup>17</sup>	4 ___
MEC 228	Kinematics Design <sup>14</sup>	3 ___	MEC 260	Mechanical Design Project <sup>18</sup>	2 ___
MEC 250	Solid Modeling <sup>9</sup>	3 ___	MCT 220	Robotics & Control Systems <sup>16</sup>	3 ___
			___ ___	Humanities Electives or Social Science Elective	3 ___
<b>Total:</b>		<b>16</b>	<b>Total:</b>		<b>18</b>

**Total Credits Required: 63**

- 1 MAT 013 or passing score on the College's Placement Test. Corequisites: MAT 014
- 2 Appropriate score on the College Placement Test and/or satisfactory score on the Diagnostic Examination, "C" or better in Mat 014 or Mat 014A and MAT 014B, or departmental approval. MAT 129 may be substituted for MAT 129 A & B
- 3 MAT 129A or Equivalent courses.
- 4 A passing score on the writing portion of the College's Placement Test or a grade of "C" or better in ENG 010; completion of RDG 009 with a "C" or better or a score on the reading portion of the College Placement Test that exempts the students from RDG 009.
- 5 MAT 013 or appropriate score on College Placement Test. Coreq: MAT 014 or higher level.
- 6 Students have the option of substituting health Education Electives in place of the Physical Education Elective.
- 7 A grade of "C" or better in ENG 121 and a passing score on the reading portion of the College Placement Test or a grade of "C" or better in ENG 121 and a grade of "C" or better in RDG 011.
- 8 MCT 101, MAT 129A or MAT 129.
- 9 MEC 125
- 10 MAT 129 or MAT 129B or appropriate score on the College Placement Test and/or satisfactory score on the Diagnostic Examination, or departmental approval. MAT 131 may be substituted for MAT 131 A & B.
- 11 MAT 131A
- 12 MAT 129 B or MAT 129.
- 13 CIT 105
- 14 MEC 123 & MAT 129B or MAT 129
- 15 PHY 121
- 16 ELT 105, MEC 123, MAT 129 B or MAT 129 Coreq MEC 204
- 17 CIT 105, MAT 129 B or MAT 129
- 18 MEC 228. Coreq: MEC 204, MCT 220.