



[AS-ENR; CIP Code 14.0101]

### *Associate in Science (A.S.) – Transfer*

The goal of this program is to provide the first two years of an Engineering Science baccalaureate degree program for students who wish to transfer to a four-year institution as an Engineering Science major.

#### Program Learning Outcomes

Students who have completed the program will be able to:

- Analyze and understand engineering designs
- Deliver an effective and informative professional engineering presentation
- Demonstrate an understanding of engineering materials used in different fields

#### Program Notes

<sup>1</sup> Students planning to transfer to Rowan University should take the following courses. A maximum of 5 program electives selected from the ones listed below are required for the A.S. degree. Rowan University may require additional courses not offered at this institution.

<sup>2</sup> Students wishing to take additional program electives are encouraged to declare a Secondary Program of study by enrolling in an Engineering Science Certificate of Achievement. Financial aid will NOT cover the additional program electives UNLESS you are enrolled in a Certificate of Achievement.

<sup>3</sup> Students should review requirements at their transfer institutions. ENR 103, ENR 201, ENR 202 may not transfer to some institutions, please see an advisor for a graduation variance.

#### Program Contact

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Engineering  
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## Engineering Science, A.S.

### FIRST YEAR – Fall Semester

<input type="checkbox"/> CHM 111 General Chemistry I	4
<input type="checkbox"/> CSC 205 Programming in C++	4
<input type="checkbox"/> ENG 101 English Composition I	3
<input type="checkbox"/> MAT 108 Calculus I	4
<input type="checkbox"/> ENR 102 First Year Engineering Clinic I	2
	<hr/> 17

### Spring Semester

<input type="checkbox"/> CHM 112 General Chemistry II or ____ Program Elective <sup>1</sup>	3–4
<input type="checkbox"/> PHY 201 Physics I (calculus-based)	4
<input type="checkbox"/> ENR 103 First Year Engineering Clinic II <sup>3</sup>	2
<input type="checkbox"/> ENR 207 Engineering Materials or ____ Program Elective <sup>1</sup>	3–4
<input type="checkbox"/> MAT 122 Calculus II	4
	<hr/> 16–18

### SECOND YEAR – Fall Semester

<input type="checkbox"/> ENG 102 English Composition II	3
<input type="checkbox"/> ENR 201 Sophomore Clinic I <sup>3</sup>	1
<input type="checkbox"/> MAT 221 Calculus III	4
<input type="checkbox"/> HPE ____ Health and Physical Education elective or ____ Free Elective <sup>1</sup> or ____ Program Elective <sup>1</sup>	1–4
<input type="checkbox"/> PHY 202 Physics with Calculus II or ____ Program Elective <sup>1</sup>	3–4
<input type="checkbox"/> ____ Humanities elective or ____ Social Science elective	3
	<hr/> 15–18

### Spring Semester

<input type="checkbox"/> MAT 205 Differential Equations	4
<input type="checkbox"/> ENR 202 Sophomore Clinic II <sup>3</sup>	1
<input type="checkbox"/> HPE ____ Health and Physical Education elective or ____ Free Elective <sup>1</sup> or ____ Program Elective <sup>1</sup>	1–4
<input type="checkbox"/> ____ Humanities elective	3
<input type="checkbox"/> PHI 104 Ethics	3
	<hr/> 12–15

**TOTAL MINIMUM CREDITS: 60**

#### Program Electives<sup>1,2</sup>

Mechanical <sup>2</sup>	Electrical/ Computer <sup>2</sup>	Civil <sup>2</sup>	Chemical <sup>2</sup>	Biomedical <sup>2</sup>
PHY 202	PHY 202	MAT 202	CHM 112	CHM 112
ENR 207	MAT 202	SPE 101	MAT 202	PHY 202
MAT 202	SPE 101	GEO 115	SPE 101	MAT 202
SPE 101	CSC 220	ENR 207	CHM 201	SPE 101
ENR 211	ENR 108	ENR 211	CHM 202	BIO 101
ENR 212	ENR 218	ENR 212		
ENR 213		ENR 213		
		CET 108		
		DFT 103		