

Engineering Science AS (EGRS)

Catalog: 2025-2026			Effective Date: 9/01/2024
CR	COURSE	COURSE TITLE	SUNY GEN ED
1-2	HRD 100, HRD 100A or HRD 110	FRESHMAN EXPERIENCE	
3	ENG 101	<i>Introduction to College Writing</i>	GCWO
3	ENG 102, ENG 103, ENG 104, ENG 105, ENG 106, ENG 107, ENG 108, ENG 109 or ENG 110	ENG 110 <i>Elements of Technical Writing</i> recommended	GCWO
3	SUNY GEN ED Social Sciences SUNY GEN ED The Arts SUNY GEN ED Humanities SUNY GEN ED World Languages		GSSC GART GHUM GWRL
3	SUNY GEN ED Diversity: Equity, Inclusion and Social Justice	ECO 202 <i>Microeconomics</i> recommended	GDVR
4	CHM 111 (Prereq Required)	<i>General Chemistry I</i>	GNSL
3	CIS 143 (Prereq Required)	<i>Introduction to Programming</i>	
3	EGR 120	<i>Introduction to Engineering</i>	
4	EGR 105 (Prereq Required)	<i>Engineering Physics I</i>	GNSL
4	EGR 106 (Prereq Required)	<i>Engineering Physics II</i>	GNSL
4	EGR 204 (Spring only - Prereq Required)	<i>Engineering Physics III</i>	GNSL
4	EGR 222 (Fall only - Prereq Required)	<i>Circuit Analysis</i>	
4	MAT 131 (Prereq Required)	<i>Calculus I</i>	GMAT
4	MAT 132 (Prereq Required)	<i>Calculus II</i>	GMAT
4	MAT 231 (Fall only - Prereq Required)	<i>Calculus III</i>	
4	MAT 232 (Spring only - Prereq Required)	<i>Differential Equations and Series</i>	
Choose 9-10 credits by advisement			
	CHM 112 (Prereq Required)	<i>General Chemistry II</i>	
	CHM 203 (Fall only - Prereq Required)	<i>Organic Chemistry I</i>	
	CIS 144 (Prereq Required)	<i>Intermediate Programming in a Windows Environment</i>	
	CIS 243 (Spring only – Prereq Required)	<i>Data Structures and Objects in C++</i>	
	EGR 183 (Spring even years only - Prereq Required)	<i>Digital Logic Design</i>	
	EGR 207 (Fall only - Prereq Required)	<i>Mechanics I – Statics</i>	
	EGR 208 (Spring only - Prereq Required)	<i>Dynamics</i>	
	EGR 209 (Spring only - Prereq Required)	<i>Mechanics II – Mechanics of Materials</i>	
64	Minimum credits required for graduation		

Note: Please review the back of this form for additional information.

Notes on Engineering Science AS (EGRS)

❖ **COURSE PREREQUISITES:**

CHM 111	CHM 103 (or Regents Chemistry 70) and MAT 108 (or Regents Math B 70 or Algebra 2/Trigonometry 70)	EGR 105	MAT 131
CHM 112	CHM 111 with grade of C or better	EGR 106	EGR 106
CHM 203	CHM 112	EGR 183	MAT 108 with C or better
CIS 143	MAT 108 or CIS 122 or CIS 140	EGR 204	EGR 105 and MAT 132
CIS 144	CIS 140 with C or better or CIS 143 with C or better	EGR 207	EGR 105
CIS 243	CIS 144 (with C or better) <u>and</u> MAT 129	EGR 208	EGR 207 and MAT 231
MAT 131	MAT 121 with C or better within 4 years <u>and</u> MAT 125 with C or better within 4 years or equivalent	EGR 209	EGR 207 and MAT 231
MAT 132	MAT 131 with C or better within 4 years	EGR 222	MAT 132
MAT 231	MAT 132 with C or better within 4 years		
MAT 232	MAT 231 with C or better within 4 years		

❖ **RECOMMENDED SEQUENCE:**

FIRST YEAR

First Semester

1-2	HRD 100, HRD 100A or HRD 110
3	ENG 101
4	MAT 131
3	EGR 120
3	CIS 143
4	CHM 111

Second Semester

3	ENG 102 – ENG 110 (ENG 110 recommended)
4	MAT 132
4	EGR 105
3	SUNY GEN ED Social Sciences, SUNY GEN ED The Arts, SUNY GEN ED Humanities or SUNY GEN ED World Languages
0-4	Engineering Core elective (See Note 1)

SECOND YEAR

Third Semester

4	EGR 222
4	MAT 231
4	EGR 106
3-4	Engineering Core elective (See Note 1)

Fourth Semester

3	SUNY GEN ED Diversity: Equity, Inclusion and Social Justice
4	MAT 232
4	EGR 204
3-6	Engineering Core elective (See Note 1)

NOTES:

1. See Core Engineering lists for course requirements. Substitutions can be made to Core coursework depending upon transfer requirements of 4-year schools.
2. EGR 183 is offered even years - Spring only

❖ **DEFINITION OF COURSE REQUIREMENTS:** See <http://catalog.sunyacc.edu/academics/degree requirements>

❖ **FINANCIAL AID RECIPIENTS:** A student **must** choose courses that are within their degree program. Students are encouraged to meet with their assigned academic advisor for any questions about course selection and degree program requirements. Please visit the Office of Financial Aid for any aid-related questions.

❖ **SUNY GEN ED KNOWLEDGE AREAS:** See <http://catalog.sunyacc.edu/academics/generaleducation>

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| ❖ Mathematics (and Quantitative Reasoning) (GMAT) | ❖ Diversity: Equity, Inclusion and Social Justice (GDVR) |
| ❖ Natural Sciences (and Scientific Reasoning) (GNSC/L) | ❖ Humanities (GHUM) |
| ❖ Social Sciences (GSSC) | ❖ The Arts (GART) |
| ❖ US History and Civic Engagement (GUSC) | ❖ World Languages (GWRL) |
| ❖ World History and Global Awareness (GGLB) | ❖ Communication – Written and Oral (GCWO) |