Slippery Rock University of Pennsylvania – Curriculum Guide
Bachelor of Science in Electrical and Computer Engineering

ROCK STUDIES REQUIREMENTS (37-38 credits)

Course	Title		Cr
THE ROCK (10 credits)			
EXEMPT	Foundations of Academic Discovery		0
✔ ENGL 102	Critical Writing	**ENGL102**	3
EXEMPT	Critical Reading		0
✔ COMM 200	Civil Discourse	**COMM201**	3
✔ MATH 225	Calculus I ★	**MATH221**	4
INTEGRATED INQUIRY (16-17 credits)			
Creative and Aesthetic Inquiry			
✔	**Humanities Elective – SRU recommends Category I or II**		**3**
Humanities Inquiry			
✔	**ECON 101 or 102 - Principles of Economics**		**3**
Social Science Inquiry			
✔	**PHED 125 or HLTH 120**		**2-3**
Natural Science Inquiry			
✔ CHEM 107/111	General Chemistry I / Lab ★	**CHEM101**	4
Physical Science Inquiry			
✔ PHYS 216	University Physics 1 / Lab ★	**PHYS221**	4
ADDITIONAL ROCK STUDIES REQUIREMENTS (11 credits)			
ENGL 205	Intro to Professional Writing		3
✔ MATH 230	Calculus II ★	**MATH222**	4
✔ PHYS 217	University Physics 2 / Lab ★	**PHYS222**	4

OTHER BASIC REQUIREMENTS

(Check with your advisor or a current degree audit report to see if you have been exempted from this course.) The credit earned in this course will not be counted toward the 120-credit hour minimum needed to earn a degree.

EXEMPT	Beginning Algebra	

IMPORTANT CURRICULUM GUIDE NOTES

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisors to ensure accurate progress towards degree completion. *The information on this guide is current as of the date below. Students are responsible for curriculum requirements at the time of enrollment at the University.*

★	Course may have a prerequisite. See Undergraduate Online Catalog.
^	Course counts for 50% of Major requirements and Major GPA
PASSHE = Pennsylvania State System of Higher Education Institution	

MAJOR/CONCENTRATION REQUIREMENTS (77 credits)
- 42 major credits must be taken at SRU or PASSHE
- 42 major credits must be taken at the 300 level or above

Course	Title		Cr
Required Engineering Courses (49 credits)			
✔ ENGR 110	Introduction to Engineering^	**DRFT115**	3
ENGR 120	Engineering Design Tools ★^		2
✔ ENGR 210	Statics ★^	**PHYS241**	3
ENGR 250	Circuit Analysis I★^		3
ENGR 251	Circuit Analysis Lab★^		1
ENGR 340	Engineering Economics ★^		3
MECH 330	Introduction to Mechatronics ★^		4
MECH 411	Automatic Control Systems ★^		3
ECSE 230	Instrumentation with Lab ★^		3
ECSE 310	Circuit Analysis II ★^		3
ECSE 320	Electrical Circuit Design ★^		3
ECSE 340	Processor Design and Structure ★^		3
✔ ECSE 350	Signals and Systems ★^ **Sci/Tech Elective: SRU recommends ELEC 291**		**3**
ECSE 360	Engineering Electromagnetics ★^		3
ECSE 410	Energy Conversion ★^		3
ECSE 460	Capstone Design I ★^		3
ECSE 461	Capstone Design II ★^		3
Electrical & Computer Engineering Electives – Choose two (6 credits)			
ECSE 420	Wireless Communication ★^		3
ECSE 430	Digital Signal Processing ★^		3
ECSE 440	Electrical Power Systems ★^		3
ECSE 470	Applied Digital Systems ★^		3
Required Math and Science Courses (22 credits)			
✔ MATH 231	Calculus III ★^	**MATH223**	4
✔ MATH 232	Linear Algebra **Sci/Tech Elective – SRU recommends MATH 230**		**3**
✔ MATH 301	Differential Equations I ★^	**MATH224**	3
STAT 350	Applied Statistics ★^		3
✔ CPSC 146	Programming Principles ★^	**COMP230**	3
CPSC 246	Advanced Programming Principles ★^		3
CPSC 423	Computer Networks ★^		3

FREE ELECTIVES (8-9 credits)

✔	**ENGL 101-College Writing**	**3**
✔	**CHEM 102-Chemistry II**	**4**

BC3-SRU Engineering, A.S. to Electrical & Computer Engineering, B.S.

Curriculum Category	Credits Completed	Credits Needed
Rock Studies	**34-35**	**3**
Major Requirements	**22**	**55**
Free Electives	**7**	**1-2**
TOTAL CREDITS	**63-64**	**59-60**
123 credits required for graduation		