

APPLIED ELECTRONICS ENGINEERING (BACHELOR OF SCIENCE)

In addition to courses noted below, candidates for graduation must successfully complete all JSU Academic Regulations. **More information about general education requirements can be found in the Summary of Degrees/Requirements (<https://catalog.jsu.edu/undergraduate/summary-degrees-requirements/>) section of the catalog.**

Freshman		Hours
Fall		
EH Composition sequence		3
History sequence		3
EC 221	Principles of Microeconomics	3
MS 125	Calculus I	4
AE 201	Microcomputers: Applications and Techniques or CS 201 Introduction to Information Technology	3
SSC 101	First Year Experience	0
Hours		16
Spring		
EH Composition sequence		3
History sequence		3
AE 210	Manufacturing Fundamentals	3
AE 211	AC/DC Circuits	3
General Electives		3
Hours		15
Sophomore		
Fall		
EH 141	Speech	3
Natural Science ²		4
AE 251	Computer-Aided Design	3
EG 255	Engineering Computation	3
General Electives		2
Hours		15
Spring		
Literature sequence		3
Natural Science ²		4
Social/Behavioral Science ¹		3
AE 343	Engineering and Technology Management or MGT 301 Principles of Management	3
AE 380	Industrial Safety and Health	3
Hours		16
Junior		
Fall		
AE 225	Electronic Devices I	4
AE 252	Programmable Controllers	3
AE 311	Electronics - Digital	4
AE 317	Industrial Networking I ³ or AE 366 Control Systems Technology	3
AE 344	Engineering Economy and Cost Analysis	3
AE 393	Junior Seminar (WI)	1
Hours		18
Spring		
Fine Arts		3
Literature sequence		3
EH 322	Technical Writing (WI) or CBA 350 Business Communications (WI)	3
AE 451	Advanced Programmable Controllers ³ or AE 427 Industrial Networking III	3

Select one of the following:		3
AE 326 & AE 327	Electronic Devices II and Electronic Devices Lab	
AE 417	Industrial Networking II	
Hours		15
Senior		
Fall		
AE 372	Statistical Analysis for Quality Control	3
AE 416 or AE 429	Manufacturing Automation and Robotics ³ or Applied Digital Communications Systems	3
Applied Engineering Electives		4
General Electives		3
Hours		13
Spring		
AE 316	Advanced Electronics	4
AE 494	Applied Engineering Senior Internship (WI)	2
General Electives		6
Hours		12
Total Hours		120

The student must have earned an overall grade point average of 2.75 based upon a 4.00 scale to include all AE courses and MS courses with a "C" or better.

- ¹ Select from: EC 222 Principles of Macroeconomics (3) (recommended), GY 120 World Regional Geography (3), PSC 100 Introduction to American Government (3), PSY 201 Principles of Psychology (3), or SY 221 Introduction to Sociology (3).
- ² Select from: CY 105 General Chemistry I (3), CY 106 General Chemistry II (3), CY 107 General Chemistry Laboratory I (1), and CY 108 General Chemistry Laboratory II (1) or PHS 201 College Physics I (3), PHS 202 College Physics II (3), PHS 203 College Physics Laboratory Techniques I (1), and PHS 204 College Physics Laboratory Techniques II (1).
- ³ See advisor for approval.