

BIOMEDICAL ENGINEERING

Bachelor of Science (B.S.)

At-A-Glance



Minimum GPA
2.0



Limited Access
No



Additional Program
Application
No



Test Required
No



Online Option
No



Total Credits
61

Important Notes

- Must earn a grade C- or higher in courses unless otherwise indicated.
- Foreign Language Requirements: All undergraduate students are **required** to have **two** years of Foreign Language study **prior** to graduation with a bachelor's degree from Florida A&M University.
- Civics Literacy Requirement must be met prior to graduation.



RECOMMENDED PRE-TRANSFER COURSEWORK

YEAR 1

Fall	Spring
ENC 1101 Freshman Comm Skills I (3)	ENC 1102 Freshmen Comm Skills II (3)
MAC 2311 Calculus I (4)	MAC 2312 Calculus II (4)
CHM 1045-1045L General Chem I w/Lab (4)	CHM 1046/1046L General Chemistry II w/Lab (4)
EGN 1004L 1st Year Engineering Lab (1)	BSC 1010 General Biology I (3)
Social Science Core Course (3)	
Total: 15	Total: 14

YEAR 2

Fall	Spring
MAC 2313 Calculus III (5)	ECH 3301 Process Analysis and Design (4)
CHM 2210 Organic Chemistry I (3)	CHM 2211 Organic Chemistry II (3)
PHY 2048/2048L General Physics I w/Lab (5)	PHY 2049/2049L General Physics II w/Lab (5)
ECH 3023 Mass & Energy Balance I (3)	ECH 3024 Mass & Energy Balance 2 II (4)
Total: 16	Total: 16



JOB OUTLOOK

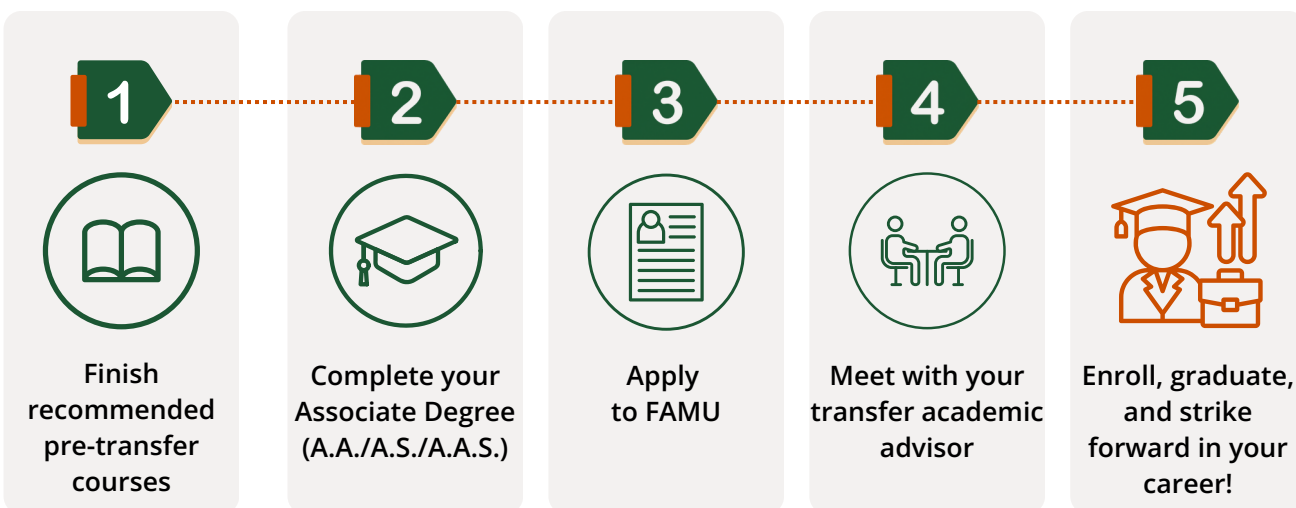
Employment of bioengineers and biomedical engineers is projected to grow 5 percent from 2024 to 2034, faster than the average for all occupations. About 1,300 openings for bioengineers and biomedical engineers are projected each year, on average, over the decade.

Career Opportunities

- Bulk and Fine Chemicals
- Consumer Products
- Biotechnology and Pharmaceuticals
- Electronics
- Environmental Safety and Health
- Fuels and Energy Conversion
- Process Design
- Post-secondary Teachers
- Research Assistant
- Laboratory Technician
- Environmental Consultant
- Healthcare
- Biotechnology
- Pharmaceutical



NEXT STEPS



CONTACT US

Program Website

<https://eng.famu.fsu.edu/cbe>

Contact:

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TRANSFER PATHWAY GUIDE

CIVIL ENGINEERING

Bachelor of Science (B.S.)

FAMU

FAMU-FSU College of Engineering

Guide No. ENG-02

At-A-Glance



Minimum GPA
2.0



Limited Access
No



Additional Program
Application
No



Test Required
No



Online Option
No



Total Credits
60

Important Notes

- Must earn a grade C- or higher in courses unless otherwise indicated.
- Foreign Language Requirements: All undergraduate students are **required** to have **two** years of Foreign Language study **prior** to graduation with a bachelor's degree from Florida A&M University.
- Civics Literacy Requirement must be met prior to graduation.



RECOMMENDED PRE-TRANSFER COURSEWORK

YEAR 1

Fall	Spring
ENC 1101 Freshman Comm Skills I (3)	ENC 1102 Freshmen Comm Skills II (3)
MAC 1105 College Algebra (3)	MAC 1140 Pre-Calculus (3)
Social Science Core Course (3)	Social Science Course (3)
A.A. Elective (3)	Humanities Core Course (3)
A.A. Elective (3)	A.A. Elective (3)
Total: 15	Total: 15

YEAR 2

Fall	Spring
MAC 1114 Trigonometry (3)	MAC 2311 Calculus I (4)
Humanities Course (3)	CHM 1045/1045L General Chemistry I w/Lab (4)
Natural Science Course (3)	A.A. Elective (3)
A.A. Elective (3)	A.A. Elective (3)
SPC 2608 Public Speaking (3)	EGN 1004 First Year Engineering Lab (1)
Total: 15	Total: 15



JOB OUTLOOK

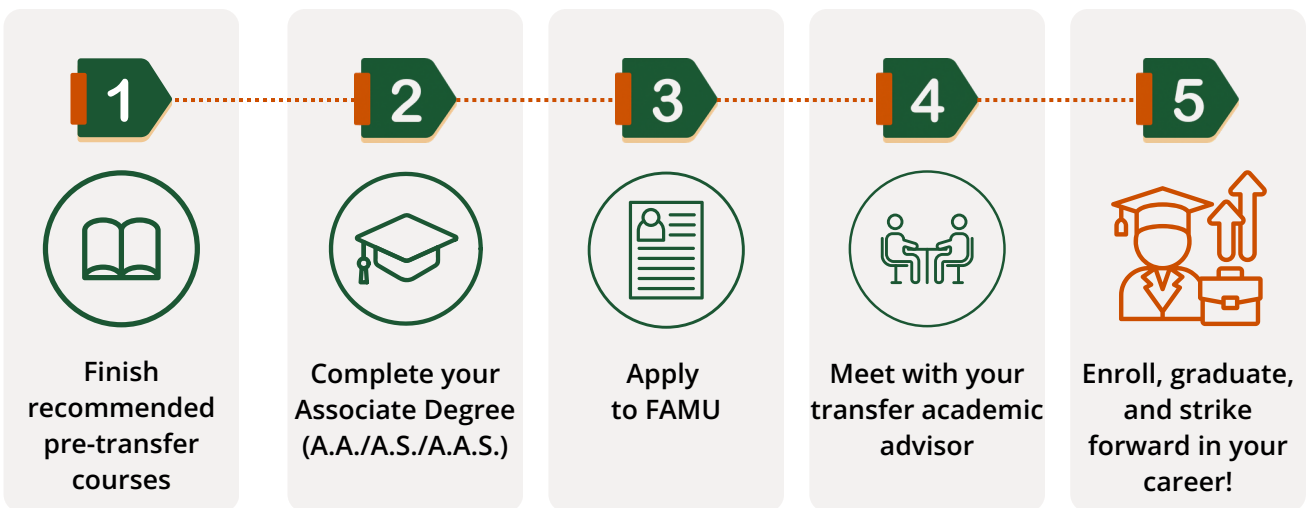
Employment of civil engineers is projected to grow 5 percent from 2024 to 2034, faster than the average for all occupations. About 23,600 openings for civil engineers are projected each year, on average, over the decade.

Career Opportunities

- Civil Engineer
- Structural Engineer
- Transportation Engineer
- Highway Engineer
- Water Resource Engineer
- Construction Engineer
- Bridge Engineer
- Hydraulic Engineer
- Stormwater Engineer
- Environmental Engineer
- Geotechnical Engineer
- Engineering Management (additional education/credentials)



NEXT STEPS



CONTACT US

Program Website

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At-A-Glance



Minimum GPA
2.0



Limited Access
No



Additional Program
Application
No



Test Required
No



Online Option
No



Total Credits
60

Important Notes

- Must earn a grade C- or higher in courses unless otherwise indicated.
- Foreign Language Requirements: All undergraduate students are **required** to have **two** years of Foreign Language study **prior** to graduation with a bachelor's degree from Florida A&M University.
- Civics Literacy Requirement



RECOMMENDED PRE-TRANSFER COURSEWORK

YEAR 1

Fall	Spring
ENC 1101 Freshman Comm Skills I (3)	ENC 1102 Freshmen Comm Skills II (3)
MAC 1105 College Algebra (3)	MAC 1140 Pre-Calculus (3)
Social Science Core Course (3)	BSC 2010 Biological Science I (3)
A.A. Elective (3)	Social Science (3)
A.A. Elective (3)	Humanities Core Course (3)
Total: 15	Total: 15

YEAR 2

Fall	Spring
MAC 1114 Trigonometry (3)	MAC 2311 Calculus I (4)
CHM 1045/1045L General Chemistry I w/Lab (4)	CHM 1046/1046L General Chemistry II w/Lab (4)
A.A. Elective (3)	Humanities Course (3)
SPC 2608 Public Speaking (3)	A.A. Elective (3)
A.A. Elective (3)	
Total: 16	Total: 14



JOB OUTLOOK

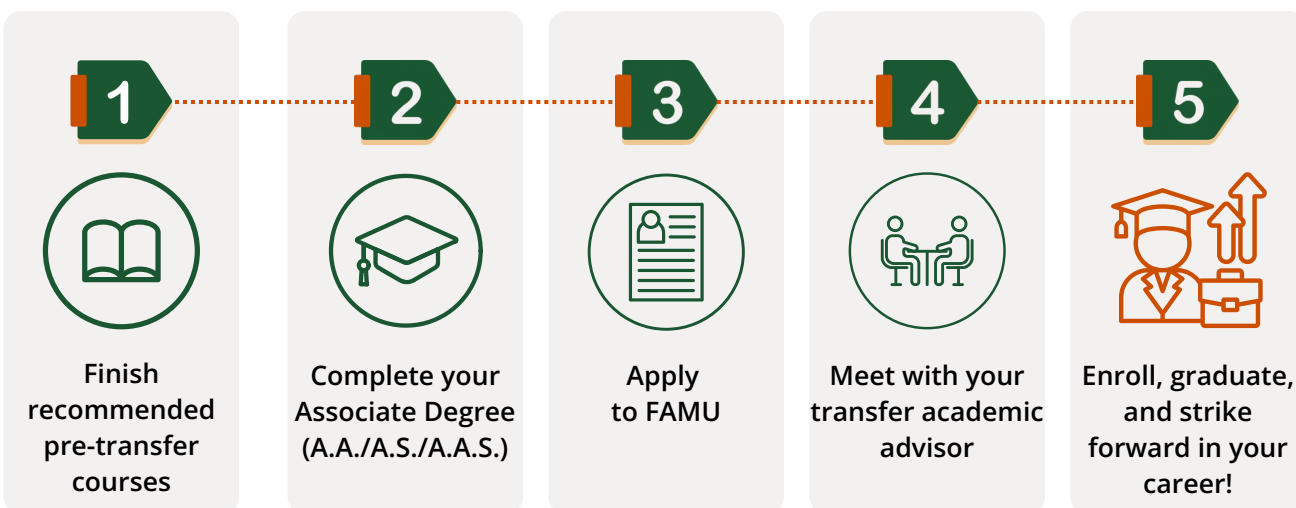
Employment of chemical engineers is projected to grow 3 percent from 2024 to 2034, about as fast as the average for all occupations. About 1,100 openings for chemical engineers are projected each year, on average, over the decade.

Career Opportunities

- Chemical Engineer
- Petroleum Engineer
- Environmental Engineer
- Biomedical Engineer
- Biochemical Engineer
- Design Engineer
- Food Engineer
- Development Engineer
- Polymer Engineer
- Project Engineer
- Process Engineer
- Research Engineer
- Materials Engineer



NEXT STEPS



CONTACT US

Program Website

<https://eng.famu.fsu.edu/cbe>

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ELECTRICAL ENGINEERING

Bachelor of Science (B.S.)

At-A-Glance

Minimum GPA
2.0Limited Access
NoAdditional Program
Application
NoTest Required
NoOnline Option
NoTotal Credits
60

Important Notes

- Must earn a grade C- or higher in courses unless otherwise indicated.
- Foreign Language Requirements: All undergraduate students are **required** to have **two** years of Foreign Language study **prior** to graduation with a bachelor's degree from Florida A&M University.
- Civics Literacy Requirement



RECOMMENDED PRE-TRANSFER COURSEWORK

YEAR 1

Fall	Spring
ENC 1101 Freshman Comm Skills I (3)	ENC 1102 Freshmen Comm Skills II (3)
MAC 1105 College Algebra (3)	MAC 1140 Pre-Calculus (3)
Social Science Core Course (3)	Social Science (3)
A.A. Elective (3)	Humanities Core Course (3)
A.A. Elective (3)	A.A. Elective (3)
Total: 15	Total: 15

YEAR 2

Fall	Spring
MAC 1114 Trigonometry (3)	MAC 2311 Calculus I (4)
Humanities Course (3)	CHM 1045/1045L General Chemistry I w/Lab (4)
A.A. Elective (3)	A.A. Elective (3)
A.A. Elective (3)	A.A. Elective (3)
SPC 2608 Public Speaking (3)	EGN 1004L First Year Engineering Lab (1)
Total: 15	Total: 15



JOB OUTLOOK

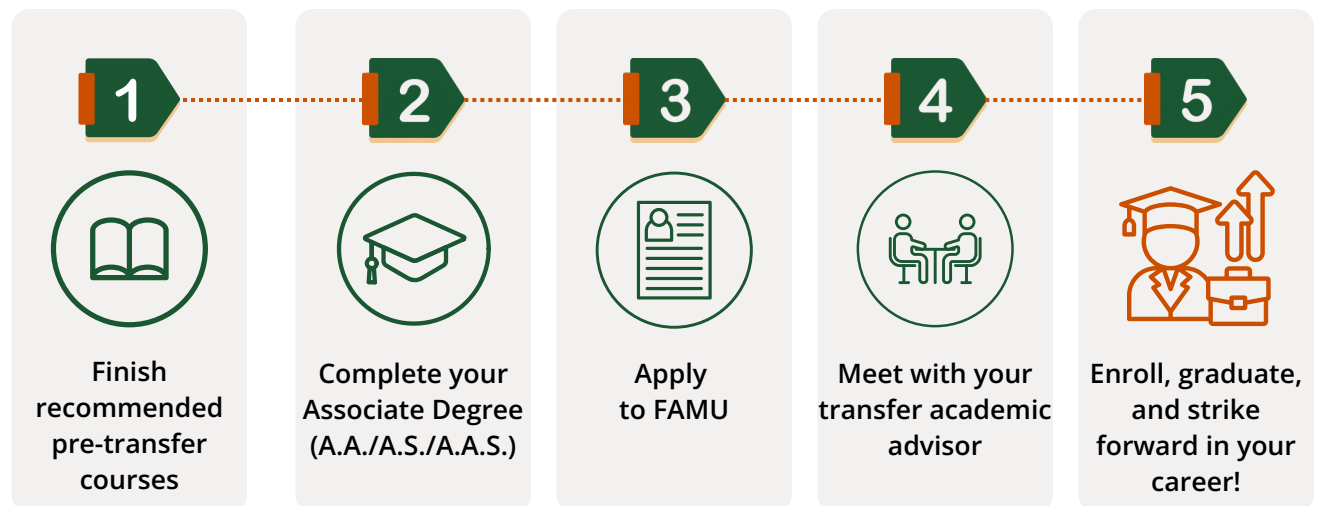
Overall employment of electrical and electronics engineers is projected to grow 7 percent from 2024 to 2034, much faster than the average for all occupations. About 17,500 openings for electrical and electronics engineers are projected each year, on average, over the decade.

Career Opportunities

- Electrical Engineer
- Analog Circuit Design Engineer
- Applications Engineer
- Product Development Engineer
- Systems Engineer (Control, Communications, and Computer)
- Digital Circuit Design Engineer
- Power Engineer



NEXT STEPS



CONTACT US

Program Website

<https://eng.famu.fsu.edu/ece>

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TRANSFER PATHWAY GUIDE

MECHANICAL ENGINEERING

Bachelor of Science (B.S.)

FAMU

FAMU-FSU College of Engineering

Guide No. ENG-05

At-A-Glance

- 

Minimum GPA
2.0
- 

Limited Access
No
- 

Additional Program
Application
No
- 

Test Required
No
- 

Online Option
No
- 

Total Credits
60

Important Notes

- Must earn a grade C- or higher in courses unless otherwise indicated.
- Foreign Language Requirements: All undergraduate students are **required** to have **two** years of Foreign Language study **prior** to graduation with a bachelor's degree from Florida A&M University.
- Civics Literacy Requirement must be met prior to graduation.



RECOMMENDED PRE-TRANSFER COURSEWORK

YEAR 1

Fall	Spring
ENC 1101 Freshman Comm Skills I (3)	ENC 1102 Freshmen Comm Skills II (3)
MAC 1105 College Algebra (3)	MAC 1140 Pre-Calculus (3)
Social Science Core Course (3)	CHM 1045/1045L General Chemistry I w/Lab (4)
A.A. Elective (3)	Humanities Core Course (3)
A.A. Elective (3)	A.A. Elective (3)
Total: 15	Total: 16

YEAR 2

Fall	Spring
MAC 1114 Trigonometry (3)	MAC 2311 Calculus I (4)
Humanities Course (3)	Social Science Course (3)
A.A. Elective (3)	COP 2221 (Insert Course Name) (3)
A.A. Elective (3)	SPC 2608 Public Speaking (3)
COP 2220 Introductory Computer Programming Course (3)	EGN 1004L First Year Engineering Lab (1)
Total: 15	Total: 14



JOB OUTLOOK

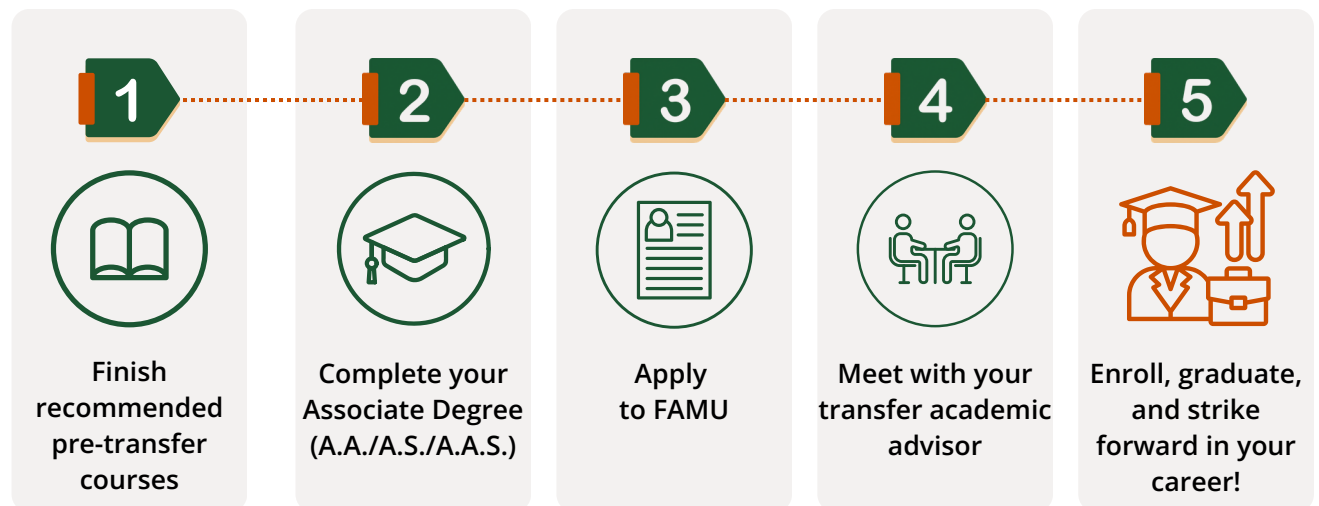
Employment of mechanical engineers is projected to grow 9 percent from 2024 to 2034, much faster than the average for all occupations. About 18,100 openings for mechanical engineers are projected each year, on average, over the decade.

Career Opportunities

- Mechanical Engineer
- Fluids Engineering
- Nuclear Engineering
- Aerospace Engineer
- Aeronautical Engineer
- Automotive Engineer
- Robotics Engineer
- HVAC Engineer
- Project Engineer



NEXT STEPS



CONTACT US

Program Website

<https://eng.famu.fsu.edu/mae>

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COMPUTER ENGINEERING

Bachelor of Science (B.S.)

At-A-Glance

Minimum GPA
2.0Limited Access
NoAdditional Program
Application
NoTest Required
NoOnline Option
NoTotal Credits
60

Important Notes

- Must earn a grade C- or higher in courses unless otherwise indicated.
- Foreign Language Requirements: All undergraduate students are **required** to have **two** years of Foreign Language study **prior** to graduation with a bachelor's degree from Florida A&M University.
- Civics Literacy Requirement must be met prior to graduation.



RECOMMENDED PRE-TRANSFER COURSEWORK

YEAR 1

Fall	Spring
ENC 1101 Freshman Comm Skills I (3)	ENC 1102 Freshmen Comm Skills II (3)
MAC 1105 College Algebra (3)	MAC 1140 Pre-Calculus (3)
Social Science Core Course (3)	CHM 1045/1045L General Chemistry I w/Lab (4)
A.A. Elective (3)	Humanities Core Course (3)
A.A. Elective (3)	A.A. Elective (3)
Total: 15	Total: 16

YEAR 2

Fall	Spring
MAC 1114 Trigonometry (3)	MAC 2311 Calculus I (4)
Humanities Course (3)	Social Science Course (3)
A.A. Elective (3)	COP 2221 Programming in C Language (3)
A.A. Elective (3)	SPC 2608 Public Speaking (3)
COP 2220 Introductory to Computer Programming (3)	EGN 1004L First Year Engineering Lab (1)
Total: 15	Total: 14



JOB OUTLOOK

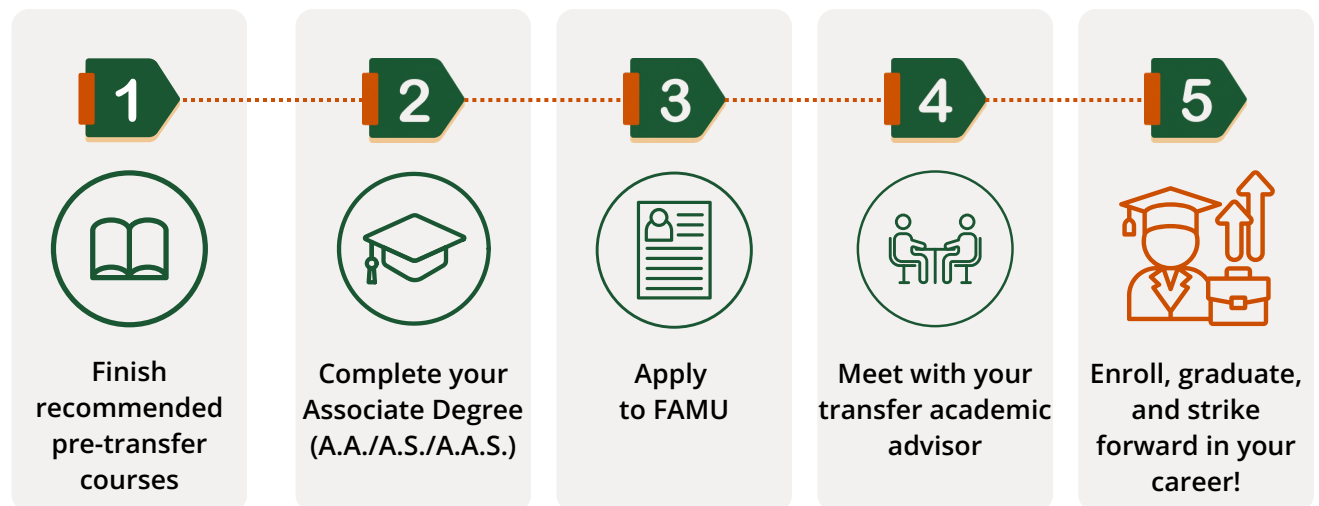
Employment of computer hardware engineers is projected to grow 7 percent from 2024 to 2034, much faster than the average for all occupations. About 4,700 openings for computer hardware engineers are projected each year, on average, over the decade.

Career Opportunities

- Computer Engineer
- Manufacturing Systems Engineer
- Embedded Systems Engineer
- Firmware Engineer, Machine
- Learning Engineer
- Cybersecurity Engineer
- AI/Deep Learning Engineer
- Telecommunications Engineer
- Network Engineer



NEXT STEPS



CONTACT US

Program Website

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INDUSTRIAL ENGINEERING

Bachelor of Science (B.S.)

FAMU-FSU College of Engineering

FAMU

Guide No. ENG-07

At-A-Glance

-  **Minimum GPA**
2.0
-  **Limited Access**
No
-  **Additional Program Application**
No
-  **Test Required**
No
-  **Online Option**
No
-  **Total Credits**
60

Important Notes

- Must earn a grade C- or higher in courses unless otherwise indicated.
- Foreign Language Requirements: All undergraduate students are **required** to have **two** years of Foreign Language study **prior** to graduation with a bachelor's degree from Florida A&M University.
- Civics Literacy Requirement must be met prior to graduation.



RECOMMENDED PRE-TRANSFER COURSEWORK

YEAR 1

Fall	Spring
ENC 1101 Freshman Comm Skills I (3)	ENC 1102 Freshmen Comm Skills II (3)
MAC 1105 College Algebra (3)	MAC 1140 Pre-Calculus (3)
Social Science Core Course (3)	CHM 1045/1045L General Chemistry I w/Lab (4)
A.A. Elective (3)	Humanities Core Course (3)
A.A. Elective (3)	A.A. Elective (3)
Total: 15	Total: 16

YEAR 2

Fall	Spring
MAC 1114 Trigonometry (3)	MAC 2311 Calculus I (4)
Humanities Course (3)	Social Science Course (3)
Natural Science Course (3)	COP 2221 Programming in C Language (3)
Social Science Core Course (3)	SPC 2608 Public Speaking (3)
COP 2220 Introductory to Computer Programming (3)	EGN 1004L First Year Engineering Lab (1)
Total: 15	Total: 14



JOB OUTLOOK

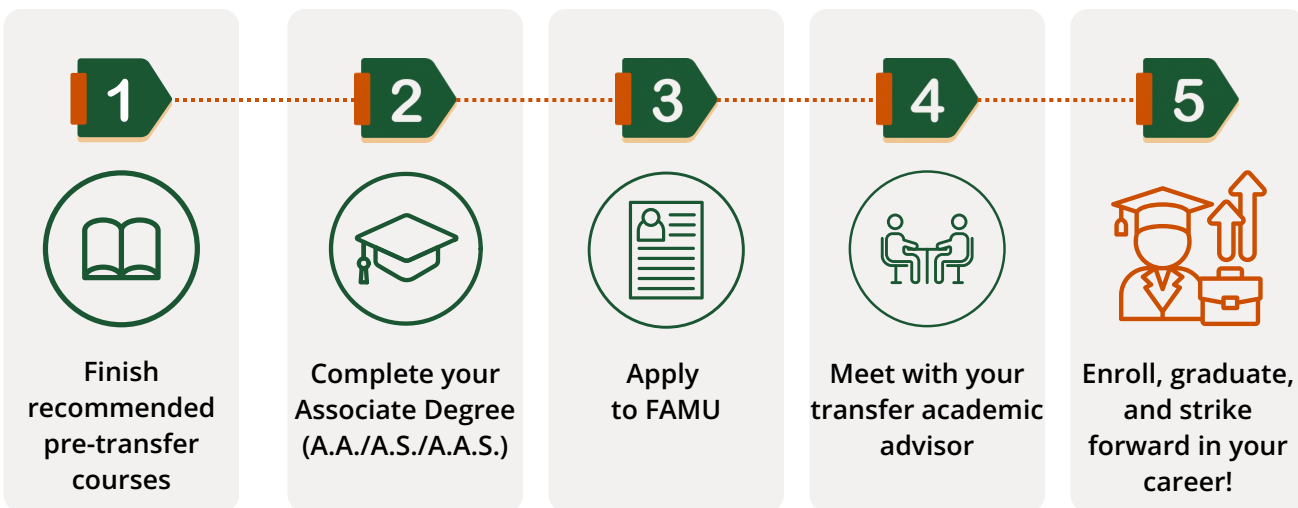
Employment of industrial engineers is projected to grow 11 percent from 2024 to 2034, much faster than the average for all occupations. About 25,200 openings for industrial engineers are projected each year, on average, over the decade.

Career Opportunities

- Industrial Engineer
- Systems Engineer
- Process Engineer
- Manufacturing Engineer
- Quality Engineer
- Operations Engineer
- Project Engineer
- Operations Research Analyst
- Ergonomics Engineer



NEXT STEPS



CONTACT US

Program Website

<https://eng.famu.fsu.edu/ime>

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