



Wayne  
County  
Community  
College  
District

# Pre-Engineering

## PAY

The median annual wage for engineers was \$91,010 in 2016.

## JOB OUTLOOK

Job outlooks vary from slower than average to faster than average depending on the engineering field. Employment of engineers projected to grow to nearly 41,500 new jobs from 2016 to 2026.

*U.S. Bureau of Labor Statistics | Postal Square Building, 2 Massachusetts Avenue, NE Washington, DC 20212-0001  
<https://www.bls.gov/careeroutlook/2018/article/engineers.htm>*

## ABOUT THE PROGRAM

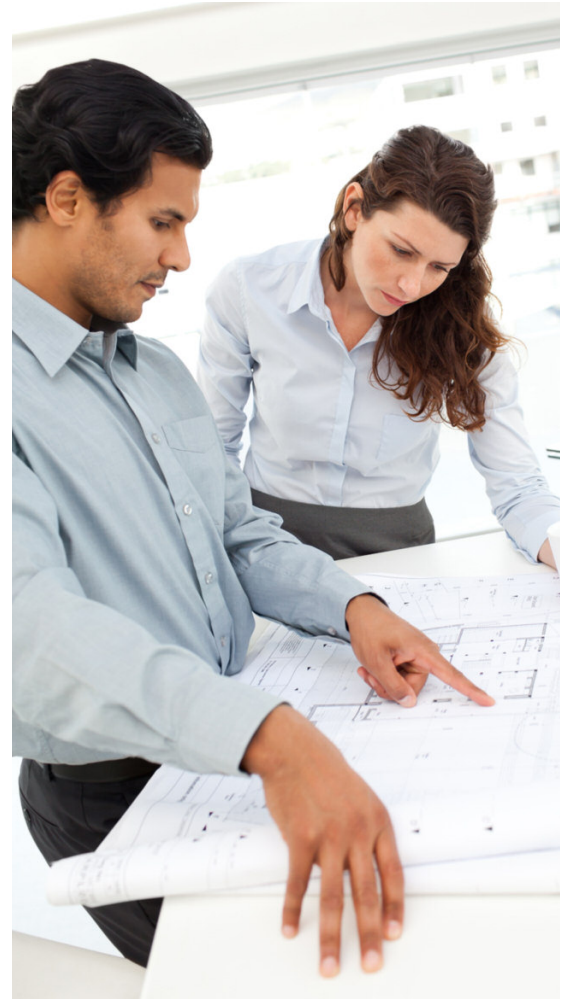
The Pre-Engineering Associate of Science degree program is designed to provide the first two-years of an engineering program whose credits will transfer to a four-year college of engineering program. Adjustments in the listed recommended program may be necessary to meet the requirements of other colleges or universities for special fields of engineering. Students should contact the institution they intend to transfer to ensure that they will have the necessary courses to transfer.

## WHAT DO ENGINEERS DO?

Engineers turn ideas into reality; they question, explore, invent, discover, and create. The engineering process is a step-by-step method for producing a device, structure, or a system that satisfies a need.

## WHERE DO THEY WORK?

Engineers work in aerospace, agriculture, architectural, biomedical, chemical, civil engineering, computer, electrical, industrial, mechanical, and many more areas of industry.



**Wayne County Community College District....  
Jobs for Today, Jobs for the Future!**

**FOR MORE INFORMATION, CALL 313-496-2600  
OR VISIT OUR WEBSITE AT WWW.WCCCD.EDU**

# Recommended Sequence of Courses

## Pre-Engineering: Associate of Science

**CR. No.    COURSE TITLE                      CREDITS**

**SEMESTER 1**

CHM 136	General Chemistry I . . . . .	4
ENG 119	English I . . . . .	3
MAT 171	Calculus I . . . . .	4
Elective:	Social Science . . . . .	3
<b>SEMESTER TOTAL . . . . .</b>		<b>14</b>

**SEMESTER 2**

CIS 209	C Programming Language . . . . .	4
ENG 120	English II . . . . .	3
MAT 172	Calculus II . . . . .	4
Elective:	Humanities . . . . .	3
<b>SEMESTER TOTAL . . . . .</b>		<b>14</b>

**SEMESTER 3**

MAT 271	Analytic Geometry and Calculus III . . . . .	4
Elective:	Natural Science . . . . .	4
PHY 265	Physics for Scientists and Engineers I . . . . .	4
<b>SEMESTER TOTAL . . . . .</b>		<b>12</b>

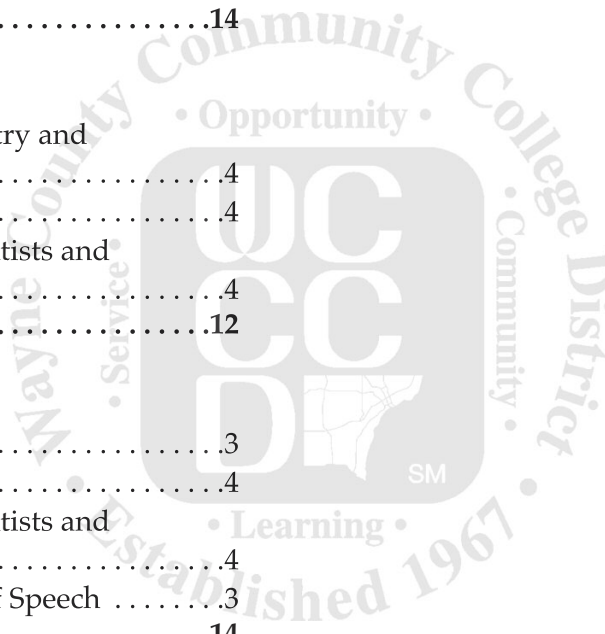
**SEMESTER 4**

Elective:	Humanities . . . . .	3
MAT 272	Linear Algebra . . . . .	4
PHY 275	Physics for Scientists and Engineers II . . . . .	4
SPH 101	Fundamentals of Speech . . . . .	3
<b>SEMESTER TOTAL . . . . .</b>		<b>14</b>

**SEMESTER 5**

MAT 273	Differential Equations . . . . .	4
PS 101	American Government . . . . .	3
Elective:	Social Science . . . . .	3
<b>SEMESTER TOTAL . . . . .</b>		<b>10</b>
<b>PROGRAM TOTAL . . . . .</b>		<b>64</b>

*Note: Program total hours may not include prerequisites.*



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