

Major Offered At:

CORVALLIS

Tillamook Bay Community College

Architectural Engineering

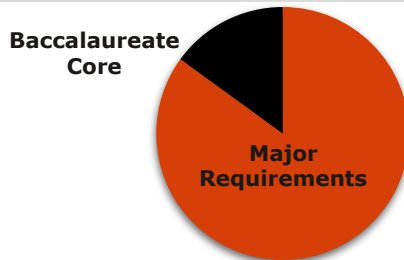
Architectural engineers design buildings that support human needs enhance the quality of life, and embrace sustainability. They are technical experts and creative problem solvers who apply engineering principles and advanced technologies to support an architect's creative vision.

What can you do with this major?

- Improve the lives of people by engineering buildings that are visually, acoustically, and thermally comfortable

- Design buildings that make use of sustainable design practices and materials
- Design structural, electrical, heating and air conditioning, plumbing, fire protection, lighting, and acoustical systems
- Collaborate with architects, other engineers, and contractors
- Optimize a building's energy conservation and functional efficiency
- Become a licensed professional engineer

Your Bachelor's Degree (BS) in the College of Engineering



- A minimum of 180 credits are required for graduation; 60 must be upper division (300 and 400-level courses).
- A maximum of 135 credits earned at a community college may be applied toward a bachelor's degree at OSU.
- Some courses can count towards your major and the Baccalaureate Core. Advisors can assist in selection.
- More info at cce.oregonstate.edu/architectural-engineering

Courses Required for Architectural Engineering Major

This list is comprehensive. Speak with OSU advisor for more information

Architectural Engineering Core Requirements	TBCC Equivalent Course	OSU Course	Notes
Civil & Constr. Engr: Orientation	N/A	CCE 101	
CCE: Problem-Solving & Tech.	N/A	CCE 102	
CCE: Graphics & Design	N/A	CCE 201/ENGR 248	
Virtual Design & Construction	N/A	CCE 203	
CCE: Seminar	N/A	CCE 207	
Plane Surveying	N/A	CEM 263	
Differential Calculus	MTH 251	MTH 251	Available online at OSU
Integral Calculus	MTH 252	MTH 252	Available online at OSU
Vector Calculus	MTH 254	MTH 254	Available online at OSU
Applied Differential Equations	N/A	MTH 256	Available online at OSU
Intro to Matrix Algebra	N/A	MTH 264	Available online at OSU
Intro to Series	N/A	MTH 265	Available online at OSU
Intro to Statistics for Engineers	N/A	ST 314 (LD)	LD = Lower Division Transfer , Available online at OSU
Chemistry for Engineering Majors	CH 221	CH 201	Available online at OSU
General Physics (Calculus)	PH 211	PH 211	
General Physics (Calculus)	PH 212	PH 212	
Electrical Fundamentals I	N/A	ENGR 201	Available online at OSU
Statics	N/A	ENGR 211	Available online at OSU
Dynamics	N/A	ENGR 212	Available online at OSU
Strength of Materials	N/A	ENGR 213	Available online at OSU
English Composition	WR 121	WR 121	Available online at OSU
Technical Writing	WR 227	WR 327 (LD)	LD = Lower Division Transfer, Available online at OSU
Public Speaking	COMM 111 COMM 112	COMM 111 COMM 114	Available online at OSU
Intro to Microeconomics	EC 201	ECON 201	Available online at OSU
Ethics	N/A	PHL 205	Available online at OSU
History of Western Architecture	N/A	ART 210	

Important Notes & Resources

Important Notes for the College of Engineering and Architectural Engineering Major:

- Grade requirements: Grade of C or better in all major coursework; 2.5 Cumulative GPA, 65% of courses passed. See <https://beav.es/oKz> for more information.
- See a sample degree plan by searching "Architectural Engineering" at admissions.oregonstate.edu/find-your-major
- Other similar majors to explore: [Civil Engineering](#), [Construction Engineering Management](#)
- To maximize course access and availability, we encourage students to begin coursework at OSU through [Degree Partnership Program](#) in Winter or Spring of 2nd year, with plans to fully begin upper division coursework at OSU in Fall of 3rd year. We encourage you to talk with an OSU advisor about your specific timeline.
- It is important to speak with CCE advisors early on, and often, to ensure correct course selection and sequencing. Schedule an appointment with an OSU CCE advisor [here!](#)

Resources and OSU Information:

- Students do not have to complete a transfer degree in order to transfer to OSU.
 - If you've completed the Oregon AAOT, all requirements of the Baccalaureate Core are complete except for Synthesis Courses and Writing Intensive Courses.
- Preparing to apply to OSU? See admissions info: transfer.oregonstate.edu
- Want to take classes at both OSU and an Oregon community college? Check out the Degree Partnership Program: partnerships.oregonstate.edu/students
- Schedule your OSU campus tour at visitosu.oregonstate.edu/visit-campus

General Education Courses (called the Baccalaureate Core)

- Complete one course in each Perspective category with no more than two in the same department.
- Full listing of TBCC courses that fulfill Bacc Core requirements: admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-tillamook-bay-community-college

SKILLS COURSES	Math Writing I Writing II Speech (Writing III) Fitness	Completed as part of the major WR 121. Required to transfer. Completed as part of the major Completed as part of the major HPE 295 + PE 295
PERSPECTIVE COURSES	Biological Science Physical Science Additional Biological or Physical Science Cultural Diversity Literature and the Arts Social Processes and Institutions Western Culture	Choose one course from BaccCore link above Completed as part of major Completed as part of major Choose one course from BaccCore link above Completed as part of major Completed as part of major Completed as part of major
DPD COURSE	Difference, Power, & Discrimination	Choose one course from BaccCore link above
SYNTHESIS COURSES	Contemporary Global Issues Science, Technology, & Society	Upper division course, take through OSU Upper division course, take through OSU

Advising Contacts

Academic advisors at your community college and OSU are available to answer your questions and assist you in creating a transfer plan. **See your community college advisor first and use this Transfer Guide to help you plan.** It is important to speak with your OSU academic advisor early on, and often, to ensure correct course selection and sequencing. See visitosu.oregonstate.edu/visit-campus to schedule your personalized visit.

Tillamook Bay Community College	tillamookbaycc.edu/programs-services/degree-partnership-program
OSU Architectural Engineering	CCE.Advising@oregonstate.edu
OSU College of Engineering Main Office	askengineering@oregonstate.edu