

# OREGON STATE UNIVERSITY ARCHITECTURAL ENGINEERING

2023-2024 Catalog Year

## FIRSTYEAR

## SECONDYEAR

Fall

Winter

Spring

Fall

Winter

Spring

**ENGR 100**

The OSU ENGR Student  
F, W, S, U (3)

**ENGR 102**

Dsgn Thinking & Problem Solving  
F, W, S, U (3)

**ENGR 103**

Computations & Algorithms  
F, W, S, U (3)  
*ENGR 102*

**CCE 207**

CCE Seminar  
F (1)  
*ENGR 103*

**CCE 201**

Graphics & Design  
F, W (3)  
*MTH 111*

**CCE 203**

Virtual Design & Construction  
W, S (3)  
*CCE 201 or ENGR 248*

**WR 121Z**

English Comp.  
Bacc Core: WR 1  
F, W, S, U (4)

**COMM 111Z  
or 114**

Bacc Core: Comm  
F, W, S, U (4.3)

**ECON 201, AEC 250,  
or GEOG 240/250**  
Economics  
Bacc Core: SPI  
F, W, S, U (3/4)

**PH 211**

Physics w/ Calc  
Bacc Core: PhySci  
F,W,S,U (4)  
*MTH 252 (co-req)*

**PH 212**

Physics w/ Calc 2  
Bacc Core: PhySci  
F,W,S,U (4)  
*PH 211*

**PH 213**

Physics w/ Calc 3  
F,W,S,U (4)  
*PH 212 & MTH 254*

**MTH 251**

Differential Calc  
Bacc Core: Math  
F, W, S, U (4)  
*MTH 112*

**MTH 252**

Integral Calculus  
F, W, S, U (4)  
*MTH 251*

**MTH 254**

Vector Calculus  
F, W, S, U (4)  
*MTH 252*

**MTH 264 + 265**

Matrix Algebra and Power Series  
F,W,S,U (2+2)  
*MTH 252*

**MTH 256**

Differential Equations  
F, W, S, U (4)  
*MTH 254*

**ST 314**

Stats for Engineers  
F, W, S, U (3)  
*MTH 252*

**CH 201**

Chemistry for Engineers 1  
F, W (3)  
*MTH 111*

**CH 202**

Chemistry for Engineers 2  
W, S (3)  
*CH 201 or 231*

**Bacc Core:**

Western Culture  
F, W, S, U (3)

**ENGR 211**

Statics  
F, W, S, U (3)  
*MTH 252*

**ENGR 213**

Strengths of Materials  
F, W, S, U (3)  
*ENGR 211*

**Bacc Core:**

Difference Power Discrimination\*  
F, W, S, U (3)

**HHS 231**

Bacc Core: Lifetime Fitness & Health  
F, W, S, U (2)

**CH 205**

Chemistry Lab  
W, S (1)  
*CH 202 (co-req)*

**PAC**

Bacc Core: Physical Activity  
F, W, S, U (1)

**Bacc Core:**

Cultural Diversity  
F, W, S, U (3)

**ART 321/322/323**

Arch. History  
Bacc Core: L&A  
F, W, S (3)

**WR 227Z**

Technical Writing  
Bacc Core: WR2  
F, W, S, U (4)  
*WR 121*

**KEY:**

**F, W, S, U** – Term Course is offered

**(X)**- Number of Credits

**Course In Italics**- Pre-req (or co-req)

THIRD YEAR			FOURTH YEAR		
Fall	Winter	Spring	Fall	Winter	Spring
<p><b>CEM 442</b> Building Construction Mgt F, S (4) CCE 207</p>	<p><b>CE 381</b> Structural Theory 1 F, W (4) ENGR 213</p>	<p><b>CE 382</b> Structural Theory 2 W, S (4) CE 381, MTH 264/265</p>	<p><b>CE 383</b> Design of Steel Structures F, W (4) CE 382</p>	<p><b>ARE 418</b> Capstone 1 W (4) CE 382, ARE 341 &amp; 361</p>	<p><b>ARE 419</b> Capstone 2 S (3) ARE 418</p>
<p><b>CEM 471</b> Electrical Facilities F, W (4) CCE 207</p>	<p><b>ARE 361</b> Fundamentals for Light Design W (4) CEM 471</p>	<p><b>ENGR 201</b> Electrical Fundamentals F, W, S, U (3) MTH 251</p>	<p><b>ARE 451</b> Advanced Construction F (4) CEM 442</p>	<p><b>CCE 422</b> Green Building Materials W, S (3) CCE 321</p>	<p><b>Bacc Core: Contemporary Global Issues*</b> F, W, S, U (3)</p>
<p><b>CE 311</b> Fluid Mechanics F, W (4) MTH 256 &amp; ENGR 213</p>	<p><b>ARE 341</b> Fundamentals of HVAC W (4) CE 311</p>	<p><b>CCE 321</b> CCE Materials F, S, U (4) ENGR 213 &amp; ST 314</p>	<p><b>CE 420</b> Engineering Planning F, W (4)</p>	<p><b>Bacc Core: Biological Sci*</b> F, W, S, U (4)</p>	<p><b>Bacc Core: Science, Tech &amp; Society*</b> F, W, S, U (3)</p>
<p><b>ARE 310</b> Architecture Studio F (4) CCE 207</p>	<p><b>CEM 472</b> Mechanical Facilities W, S (3) CCE 207</p>	<p><b>Focus Area Tech Elective**</b> F, W, S (3/4)</p>	<p><b>Focus Area Tech Elective**</b> F, W, S (3/4)</p>	<p><b>Focus Area Tech Elective**</b> F, W, S (3/4)</p>	<p><b>Focus Area Tech Elective**</b> F, W, S (3/4)</p>

**\*Bacc Core Course Recommendations:**

**Biological Science:** SUS 102;

**Difference Power and Discrimination:** ES 353, GEOG 203, GEO 309, SUS 331

**Contemporary Global Issues:** BA 432, BI 301, FES 365, GEOG 300, GEOG 331, H 388, PH 440, SUS 350

**Science Technology & Society:** PH 332, ENGR 350, PPOL 441, WSE 385

**\*\*Focus Area Elective Recommendations (14 Credits Required for Graduation):**

**Lighting Focus:** ARE 461: Lighting Design For Built Environment 1, ARE 462: Lighting Design For Built Environment 2, ARE 499: Daylighting, ARE 499: Parametric Design

**HVAC Focus:** ARE 499: Building Energy Modeling, ARE 499: Indoor Air Quality; ARE 499: Parametric Design, 4<sup>th</sup> course: choice

**Structures Focus:** CE 372: Geotechnical Engineering, CE 481: Reinforced Concrete, CE 484: Wood Design, 4<sup>th</sup> course: choice