



# Natural Science: Associate in Science Concentration in Engineering

2018-19  
 (60 credits)

**SAMPLE**

The Associate in Science is a transfer degree designed for students pursuing STEM-related educational and career goals.

**This is an example of an educational plan which can serve as a guideline to create your own academic pathway.**

Year 1			Year 2		
Fall Semester			Fall Semester:		
ENG 100	Composition I Prereq: "C" or better in ENG 22 or placement into ENG 100, or "C" or better in ENG 23 and corequisite enrollment in ENG 100X or approval of designated Language Arts representative	3	DA/DH/DL	Diversification: Arts or Humanities or Literature	3
MATH 241 (FQ)	Calculus I Prereq: Grade of "C" or better in Math 140 "C" or equivalent	4	FG (A/B/C)	Foundation: Global & Multicultural Perspectives	3
CHEM 161	General Chemistry I Prereq: Math 103 "C" or better or placement in Math 135.	3	PHYS 272	General Physics II Prereq: Credit for Math 242 and "C" or better in PHYS 170	3
CHEM 161L	General Chemistry Lab I Prereq: Credit or registration in CHEM 161	1	PHYS 272L	General Physics II Laboratory Prereq: Credit or registration in Phys 272	1
Elective		3	MATH 243	Calculus III Prereq: Grade of "C" or better in MATH 242	3
			Elective		3
	Credits	14		Credits	16
Spring Semester:			Spring Semester:		
MATH 242	Calculus II Prereq: Grade of "C" or better in MATH 241 or equivalent	4	DS	Diversification: Social Science	3
CHEM 162	General Chemistry II Prereq: Chem 161 "C" or better, or for or registration in Math 135.	3	FG (A/B/C)	Foundation: Global & Multicultural Perspectives	3
PHYS 170	General Physics I Prereq: Credit for Math 241 or higher	4	MATH 244	Calculus IV Prereq: "C" or better in MATH 243	3
PHYS 170L	General Physics I Laboratory Coreq: Credit for or registration in PHYS 170	1	CE 270 <b>OR</b>	Applied Mechanics I Prereq: PHYS 170; credit for or registration in MATH 243	3/4
			EE 160 <b>OR</b>	<b>OR</b> Programming for Engineers Prereq: Credit for or registration in MATH 140, Rec Prep: ICS 101 <b>OR</b> Basic Circuit Analysis I Prereq: Credit for or registration in MATH 243 or higher, credit for or registration in PHYS 272 <b>OR</b> Intro to Modern Physics Prereq: Cr for PHYS 272 * 272L, and cr for or reg in Math 243	
			EE 211 <b>OR</b>		
			PHYS 274 <b>OR</b>		
			SCI 295V	<b>OR</b> Instructor Consent	
Elective		3	Elective		3/2
	Credits	15		Credits	15
Summer Semester:			Summer Semester:		
	Credits			Credits	
	Total Credits for the Year	29		Total Credits for 2 Years	60

**NSCI-ENGR**

**Notes:**

- Cumulative GPA of 2.0 or higher for all course work taken in fulfillment of A.S. degree.
- No more than 12 credits in any combination of independent study or cooperative education may apply to the degree requirements.
- When there is a break in enrollment (not attending fall or spring semester), you must use the graduation requirements in effect at the time you return to WCC.

- If your bachelor's degree has been determined, you may be fulfilling specific course requirements for the 4-year degree here at WCC and applying those courses to the AA degree as elective credits.
- The last day for graduation certification is the last day of instruction.

**Check course core designation at the Class Availability website. Course core designation may differ at the various UH campuses.**

<p><b><u>FOUNDATIONS</u></b></p> <p><u>Written Communication (FW): ENG 100</u> Required: A total of 3 credits</p> <p><u>Quantitative Reasoning (FQ):</u> Met by the Math requirement in the concentration</p> <p><u>Global &amp; Multicultural Perspectives:</u> Required: A total of 6 credits from two different groups FGA: <b>ART 175, HIST 151, ANTH 151</b> FGB: <b>ART 176, HIST 152, ANTH152, GEOG 102</b> FGC: <b>REL 150</b></p>	<p><b><u>ENGINEERING CONCENTRATION</u></b></p> <p><b>CHEM 161/I (3/1) and CHEM 162 (3)</b> <b>CE 270 (3) or EE 160 (4) or EE 211 (4) or PHYS 274 (3) or SCI 295V</b> <b>MATH 241(4), MATH 242 (4), MATH 243 (3), MATH 244(3)</b> <b>PHYS 170/L (4/1) and PHYS 272/L (3/1)</b></p>
<p><b><u>DIVERSIFICATION: HUMANITIES</u></b> Required: A total of 3 credits</p> <p><u>Arts (DA)</u> <b>ART 101, 104D, 105B, 105C, 107, 108, 111, 113, 114, 115, 116, 123, 189, 202, 207, 208, 213, 214, 220, 223, 224, 243, 244, 251, 253, 260, CM 120, 204C, 220, 240, 280, 286, DNCE 121, 122, 131, 132, 221, 231, ENG 204A, 204B, 204C, 280, HUM 100, 269V(1-6), HWST 130, 131, 135, 136, 222, ICS 123, 203, JOUR 120, 200, 220, 270, 286, MUS 108, 114 (2)*, 121B(2)*, 121C(2)*, 121D(2)*, 121F(2)*, 121Z(2)*, 122B(2)*, 122C(2)*, 122D(2)*, 122F(2)*, 122Z(2)*, 130F(2)*, 211(2), 221C(2)*, 222C(2)*, 253, 280, SP 151, 231, 251, 253, THEA 101, 131, 132, 133, 211, 220, 221, 222, 231, 232, 233, 240, 260, 280</b> *Any combination that totals 3 credits will be considered the equivalent of one semester course.</p> <p><u>Humanities (DH)</u> <b>ART 269V(1-6), CM 255, HIST 230, 231, 232, 241, 242, 260, 281, 282, 284, 285, HWST 107, 115, 140, 255, 270, 273, 275, 275L(1), 285 (4), LING 102, MUS 106, 107, 166, 177, PHIL 100, 101, 102, 211, 213, REL 151, 201, 202, 205, 206, 207, THEA 177</b></p> <p><u>Literature (DL)</u> <b>ENG 270, 271, 272</b></p>	<p><b><u>DIVERSIFICATION: SOCIAL SCIENCES</u></b> Required: A total of 3 credits</p> <p><u>Social Sciences (DS)</u> <b>ANTH 175/175L, 210, BOT 105, ECON 130, 131, 220, FAMR 230, GEOG 151, 252, ICS 100, JOUR 150, PACS 108, POLS 110, 120, 130, 180, 243, PSY 100, 170, 202, 212, 224, 240, 250, 251, 257, 260, 270, SOC 100, 218, 231, 250, 251, SP 260, SOCS 225, SW 200, WS 151, 200, 202</b></p>