ASSOCIATE OF SCIENCE- TRANSFER TRACK 2

Engineering

START here

SUGGESTED Schedule to Earn an Associate Degree

If the classes listed below don't fit your schedule or you're planning to start after fall quarter, work with an advisor to develop your specialized education plan.

Year One

Fall	Credits
• MATH&151: Calculus I	5
• CHEM&161: General Chem w/Lab I	5
• ENGL&101: English Composition I	5

Winter
- MATH&152: Calculus II ... 5
- CHEM&162: General Chem w/Lab II ... 5
- Humanities or Social Science*: Select with advisor ... 5

Spring
- MATH&163: Calculus III ... 5
- CHEM&163: General Chem w/Lab III ... 5
- Specialization Course: select with advisor ... 5

Year Two

Fall
- PHYS&221: Engineering Physics I w/Lab ... 5
- Social Science*: Select with advisor ... 5
- Specialization Course: select with advisor ... 5

Winter
- PHYS&222: Engineering Physics II w/Lab ... 5
- Specialization Course: select with advisor ... 5
- Humanities*: Select with advisor ... 5

Spring
- PHYS&223: Engineering Physics III w/Lab ... 5
- Specialization Course: select with advisor ... 5
- Specialization Course: select with advisor ... 5

Total Credits Required: 90

See page 4 for Specialization Course options!

> This degree gives students the opportunity to make substantial progress toward fulfilling major requirements while completing at least half of the Breadth requirements for Humanities and Social Science.
> Completing the AS-T degree will prepare students for upper division study; it does not guarantee students admission to the major. The college recommends that the student identify one or two potential transfer schools and then contact qualified program advisors at those institutions as early as possible to obtain specific, course-by-course advice.

Milestone Courses

should be taken in the order shown. This will help you stay on track and graduate on time.

TO DO'S:

QUARTER 1
- APPLY FOR FAFSA OR WASFA FOR NEXT YEAR
- SET UP YOUR BANKMOBILE ACCOUNT
- GET FAMILIAR WITH YOUR CTCLINK STUDENT HOMEPAGE
- MEET WITH YOUR ADVISOR

QUARTER 2
- MAKE AN EDUCATION PLAN WITH YOUR ADVISOR
- APPLY FOR BBCC FOUNDATION SCHOLARSHIPS
- IDENTIFY POTENTIAL TRANSFER SCHOOLS
- CONSIDER SUMMER UNDERGRADAUTE RESEARCH PROGRAMS

QUARTER 3
- DECIDE ON TRANSFER SCHOOLS
- APPLY TO SUMMER UNDERGRADAUTE RESEARCH PROGRAMS

QUARTER 4
- UPDATE YOUR EDUCATION PLAN WITH YOUR ADVISOR
- SUBMIT TRANSFER APPLICATIONS
- APPLY FOR FAFSA OR WASFA FOR NEXT YEAR

QUARTER 5
- APPLY FOR GRADUATION (AFTER ENROLLING IN YOUR FINAL QUARTER OF CLASSES)

QUARTER 6
- ORDER CAP AND GOWN
- ATTEND GRADUATION!

Career Outlook

At a basic level, engineers apply scientific and mathematical principles to make the world a better place. They may design machines, roads, building, or circuitry; combine the inventions of others to develop or improve processes; oversee the operation of technological equipment in facilities ranging from waste treatment plants to large manufacturing facilities to water purification plants; develop new materials that are storonger, lighter, or more environmentally friendly.

Future Education Opportunities

The AS-T 2 Pre-Engineering degree path allows students to prepare for upper divions study toward a Bachelor of Science degree in engineering and enter the college or university at junior standing, should they be admitted to the school's engineering program.

Find Out More

Tyler Wallace; tylerw@bigbend.edu; 509.793.2150
https://www.bigbend.edu/academics/engineering/

Length of Program

90+ credits = 6+ quarters* if you take 15 credits each quarter.

*Your specific route may take longer than 6 quarters depending on the number of credits you take each quarter and where you start in your math and English pathways.

Which Quarter Can I Begin?

Fall, Winter, Spring, or Summer

Program Modality

This program can be completed on campus or hybrid. Courses are offered on-campus, online, or hybrid (part on-campus, part online).

Helpful Hints

- Cumulative GPA must be 2.0 or higher
- Meet with your advisor each quarter to make sure you are on track!
  - Check your transfer institution for specific course requirements.

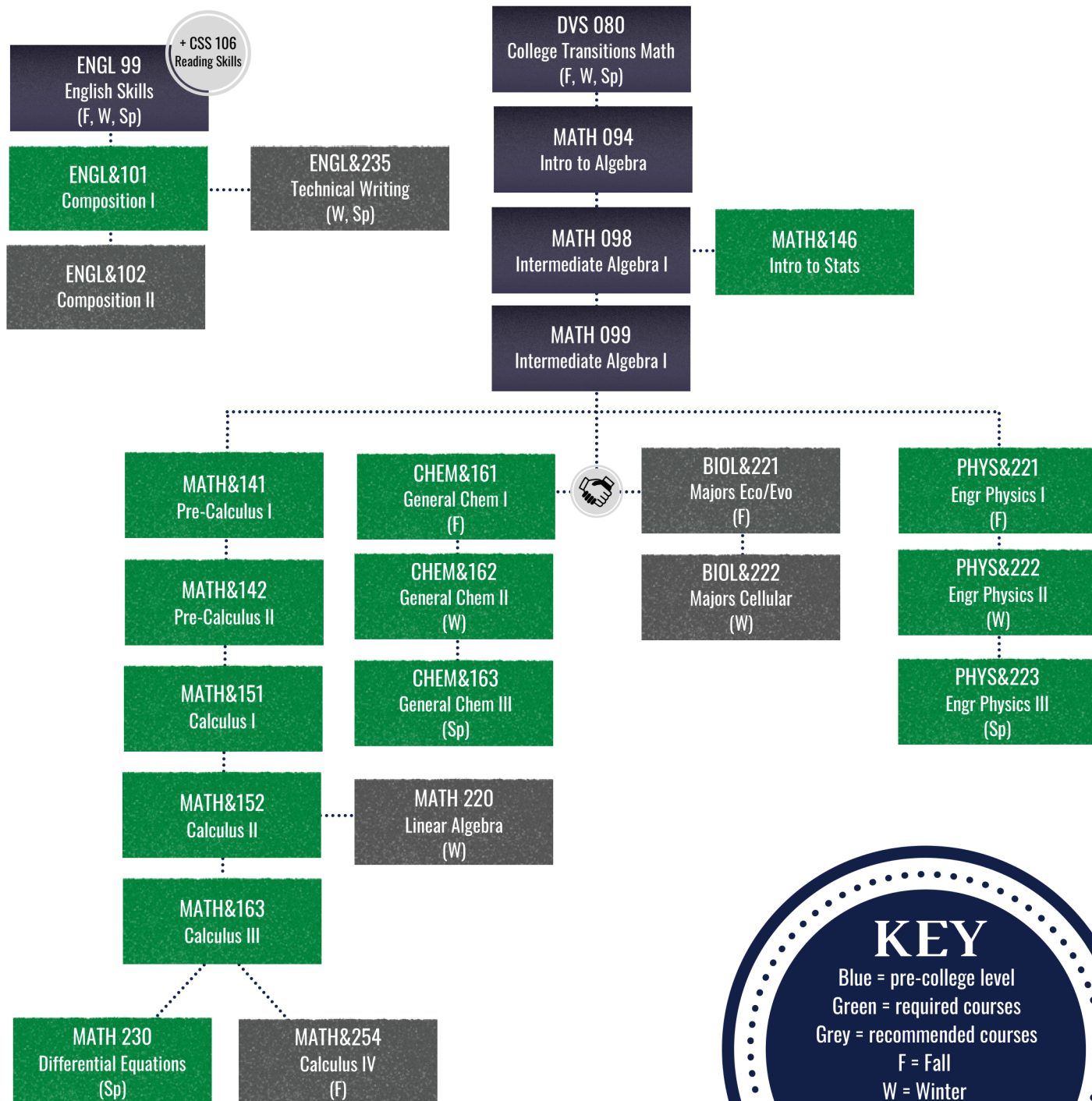# SCHOLARSHIP INFORMATION

Central Washington University
Washington State University
Eastern Washington University
University of Washington

Engineering Pre-Requisite Flow Chart

Start by talking with an advisor to determine which courses to take first based on your placement

DVS 080
College Transitions Math
(F, W, Sp)

+ CSS 106
Reading Skills

ENGL 99
English Skills
(F, W, Sp)

MATH 094
Intro to Algebra

ENGL&101
Composition I

ENGL&235
Technical Writing
(W, Sp)

MATH 098
Intermediate Algebra I

MATH&146
Intro to Stats

ENGL&102
Composition II

MATH 099
Intermediate Algebra I

MATH&141
Pre-Calculus I

CHEM&161
General Chem I
(F)

BIOL&221
Majors Eco/Evo
(F)

PHYS&221
Engr Physics I
(F)

MATH&142
Pre-Calculus II

CHEM&162
General Chem II
(W)

BIOL&222
Majors Cellular
(W)

PHYS&222
Engr Physics II
(W)

MATH&151
Calculus I

CHEM&163
General Chem III
(Sp)

PHYS&223
Engr Physics III
(Sp)

MATH&152
Calculus II

MATH 220
Linear Algebra
(W)

MATH&163
Calculus III

MATH 230
Differential Equations
(Sp)

MATH&254
Calculus IV
(F)

KEY

Blue = pre-college level
Green = required courses
Grey = recommended courses
F = Fall
W = Winter
Sp = Spring
Su = Summer
🤝 = Co-Req

My Education Plan

Name: _____   ID #: _____

✓ Quarter/Year   Quarter/Year

Quarter/Year   Quarter/Year

Quarter/Year   Quarter/Year

My Education Plan

Name: _____   ID #: _____

Quarter/Year

Quarter/Year

Quarter/Year

Quarter/Year

Quarter/Year

Quarter/Year

Congrats!

SPECIALIZATION COURSE OPTIONS
Engineering

Bioengineering & Chemical Engineering
(Includes Biomass Resource Science and Engineering)

ADDITIONAL REQUIRED COURSES

Credits
- MATH 230: Differential Equations (Sp)..........5

SELECT 4 SPECIALIZATION COURSES FROM THIS LIST

Credits
- BIOL&221: Majors Ecology/Evolution (F).......................5
- BIOL&222: Majors Cell/Molecular (W)...........................5
- CS&131: Computer Science I: C++ OR
  CS&141: Computer Science I: Java (F, Sp)......................5
- ENGL&235: Technical Writing (W, Sp)..........................5
- MATH&254: Calculus IV (F)..5

Civil Engineering & Mechanical Engineering
(Includes Aeronautical, Environmental, & Industrial Engineering)

ADDITIONAL REQUIRED COURSES

Credits
- MATH&220: Linear Algebra (W)......................................5
- MATH 230: Differential Equations (Sp)........................5

SELECT 4 SPECIALIZATION COURSES FROM THIS LIST

Credits
- BIOL&221: Majors Ecology/Evolution (F).......................5
- *CHEM&163: General Chem w/Lab III (Sp)....................5
- CS&131: Computer Science I: C++ OR
  CS&141: Computer Science I: Java (F, Sp)......................5
- ENGL&235: Technical Writing (W, Sp)..........................5
- MATH&254: Calculus IV (F)..5

Listed in the Suggested Schedule

Computer Engineering & Electrical Engineering

ADDITIONAL REQUIRED COURSES

Credits
- CS&131: Computer Science I: C++ OR
  CS&141: Computer Science I: Java (F, Sp)......................5
- MATH&220: Linear Algebra (W)......................................5
- MATH 230: Differential Equations (Sp)........................5

SELECT 5 SPECIALIZATION COURSES FROM THIS LIST

Credits
- BIOL&221: Majors Ecology/Evolution (F).......................5
- *CHEM&162: General Chem w/Lab II (W).....................5
- CS&132: Advanced Programming w/ C++ OR
  CS&142: Advanced Programming w/ Java (W).............5
- ENGL&235: Technical Writing (W, Sp)..........................5
- MATH&254: Calculus IV (F)..5

Listed in the Suggested Schedule

Materials Science & Manufacturing Engineering

ADDITIONAL REQUIRED COURSES

Credits
- MATH&220: Linear Algebra (W)......................................5

SELECT 5 SPECIALIZATION COURSES FROM THIS LIST

Credits
- BIOL&221: Majors Ecology/Evolution (F).......................5
- *CHEM&162: General Chem w/Lab II (W).....................5
- *CHEM&163: General Chem w/Lab III (Sp)....................5
- CS&131: Computer Science I: C++ OR
  CS&141: Computer Science I: Java (F, Sp)......................5
- ENGL&235: Technical Writing (W, Sp)..........................5
- MATH&230: Differential Equations (Sp).....................5
- MATH&254: Calculus IV (F)..5

Listed in the Suggested Schedule