Plan of Study 2017-2018 Academic Year

124 Total Credits for Major

*All students must initially declare as a pre-major in Industrial Technology – Vehicle Design; students cannot apply for the Major unless all pre-major prerequisites have been satisfied with a grade of C- or better. Admission to the program is competitive. See reverse side for major application details.

*Course offerings/schedule are subject to change
*Shaded areas below are Pre-major courses.

### Fall Quarter

<table>
<thead>
<tr>
<th>Year 1 Pre-major</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math 124 Calc I (5)</td>
</tr>
<tr>
<td>CHEM 121 Gen. Chemistry (5)</td>
</tr>
<tr>
<td>ENGL 101 (GUR: ACOM)</td>
</tr>
</tbody>
</table>

### Winter Quarter

<table>
<thead>
<tr>
<th>Year 1 Pre-major</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math 125 Calc II (5)</td>
</tr>
<tr>
<td>ENGR 104 Intro to Eng. &amp; Design (3)</td>
</tr>
<tr>
<td>PHYS 161 Physics w/ Calc I (5)</td>
</tr>
</tbody>
</table>

### Spring Quarter

<table>
<thead>
<tr>
<th>Year 1 Pre-major</th>
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</thead>
<tbody>
<tr>
<td>ENGR170 Intro Mat Sci. &amp; Eng. (4)</td>
</tr>
<tr>
<td>PHYS 162 Physics w/ Calc II (5)</td>
</tr>
</tbody>
</table>

**INDUSTRIAL TECHNOLOGY–VEHICLE DESIGN, BS**

**Pre-major Advisor**
Lisa Ochs
lisa.ochs@wwu.edu
360.650.4132
ET 204

**Engineering & Design**
516 High St., MS-9086
Bellingham, WA
98225
cse wwu edu engd

**NOTES:**
1. All courses in bold are required courses to apply to the major. Eligible students apply Winter Quarter.
2. See reverse for more information on approved Tech. Elec. (Technical Elective courses). The ITVD program satisfies the SCI/LSCI, A/BCOM, QSR, and Writing Proficiency (WP) General University Requirements (GURs). The GUR categories listed on this Planning Guide are what a student would need to complete beyond the GURs that the Major fulfills. Refer to the WWU Degree Planning Guide for further information and a list of GUR course options. [http://www.wwu.edu/depts/registrar/gurs.shtml](http://www.wwu.edu/depts/registrar/gurs.shtml)
3. Students may not be able to complete the degree in four years if MATH 124 and MATH 125 are not successfully completed in the first year.
4. Substitutions: CSCI 141 may be substituted for CSCI 140. MATH 124 & MATH 125 may be substituted with MATH 134 & MATH 135. MFGE 491 may be taken in place of ENG 302; other writing intensive courses are allowable as well. MGMT 311 may be substituted with OPS 360, MFGE 341, or MFGE 381. (OPS 360 requires DSCI 205.) 12.06.17
Admissions—

Program Admissions: Admission to the Industrial Technology–Vehicle Design major is a two-phase process. When students initially declare, they are designated as pre-majors. Students must complete the courses listed below in order to apply to the major. Admission to full major status is determined by academic performance as a pre-major and other factors. Admission to the major is competitive. Neither completion of the prerequisites nor attainment of any specific GPA guarantees admission.

Major Prerequisite courses: MATH 124, MATH 125, PHYS 161, ENGR 104, ENGR 170, ENGR 214, and VHCL 260. Students may be currently enrolled in no more than two of the above courses when they apply for major admission. A final decision on your application may be delayed until receipt of final grades for in-progress courses. Students must obtain at least a C- in the above courses and an overall GPA in them of 2.0 or higher to be considered. AP scores are converted to GPA as follows: 5 = A; 4 = B; 3 = C. Decisions are based primarily on cumulative GPA in the prerequisite courses, but successful completion of other required Major courses, GPA in the major, and overall GPA are also considerations.

Application: In addition to academic performance as described above, acceptance decisions will also be based on an essay (500 words or less) explaining why you want a degree in vehicle design and a portfolio of your work including pictures and descriptions of up to six pages. The portfolio should show examples of projects or products/parts that you have designed, fabricated, assembled, or produced. Online applications and portfolio examples are located on the Engineering & Design website: cse.wwu.edu/engd.

Applications are due by Noon on the first Friday in February. Only complete, on-time applications will be considered. Applicants will be notified by the end of the following week. Students who are accepted must register for MFGE 231, MFGE 261, and VHCL 261 Spring quarter before the end of Phase II registration, unless already taken. Students who do not register by the end of Phase II registration may lose their major status. Students need to have a plan to complete PHYS 162 by fall quarter junior year and PHYS 163 by winter quarter junior year.

Other times: If additional spaces become available, all pre-majors will be notified by email that applications are being accepted, including the application deadline.

Transfer Students: A student that will be transferring to Western Washington University will need to declare as a pre-major and will need to apply to the major once they have completed the prerequisite coursework (listed above). Transfer students who are interested in pursuing the IT-VD program should meet with the department Pre-major Advisor early to discuss their options.

Recommended Electives to fulfill 60 Upper Division Requirements:

- MFGE 332 INTRODUCTION TO CAM & CNC (4)
- MFGE 362 CAD MODELING & ANALYSIS USING SURFACES (4)
- MFGE 434 ADVANCED CAM & CNC (4)
- MFGE 464 DESIGN & ANALYSIS OF MECHANISMS (4)
- PCE 472 ADVANCED COMPOSITES (3)
- VHCL 400 INDEPENDENT STUDY (1-9)
- VHCL 495 DIRECTED RESEARCH (1-4)

Contact Information for Industrial Technology – Vehicle Design faculty:

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