## West Texas A\&M University Advising Services Degree Checklist 2020-2021

(For assistance completing this form, contact Advising Services at 806-651-5300)
NAME:
WT ID:
DATE:

Civil Engineering (see oor note below) College of Engineering ECS Building, Room 119 651-5257

| CORE CURRICULUM COURSES: 42 HOURS * | HRS |  |
| :---: | :---: | :---: |
| Communication (Code 10) |  |  |
| ENGL 1301 Introduction to Academic Writing and Argumentation | 3 |  |
| COMM 1315, 1318, or 1321 | 3 |  |
| Mathematics (Code 20) |  |  |
| See University Core Requirements below | (3) |  |
| Life and Physical Sciences (Code 30) |  |  |
| See University Core Requirements below | (6) |  |
| Language, Philosophy and Culture (Code 40) |  |  |
| ANTH 2351, ENGL 2321*, 2326*, 2331*, 2341*, 2343*; HIST 2311, 2323, 2372; MCOM 1307; PHIL 1301, 2374; SPAN 2311*, 2312*/**, 2313*, 2315*, or 2371 <br> Choose 1 | 3 |  |
| Creative Arts (Code 50) |  |  |
| ARTS 1301, 1303, 1304; DANC 2303; MUSI 1306, 1307 (for music majors), 1310; or THRE 1310 <br> Choose 1 | 3 |  |
| American History (Code 60) |  |  |
| HIST 1301, 1302, 2301, 2381 | 6 |  |
| Government/Political Science (Code 70) |  |  |
| POSC 2305 and 2306 | 6 |  |
| Social and Behavioral Sciences (Code 80) |  |  |
| AGBE 2317*; COMM 2377; CRIJ 1301; ECON 2301, 2302; PSYC 2301; SOCI 1301 <br> Choose 1 | 3 |  |
| Component Area Option (Code 90) |  |  |
| See University Core Requirements below | (6) |  |
| CIVIL ENGINEERING MAJOR REQUIREMENTS: 99 HOURS <br> - A grade of "C" or better must be earned in all courses required for major. <br> - A grade of " $C$ " or better is mandatory for all prerequisites listed for ECSM courses required for Civil Engineering majors. |  |  |
| UNIVERSITY CORE REQUIREMENTS: 15 HOURS * |  |  |
| $\begin{array}{\|l\|} \hline \text { CORE } 20 \\ \text { MATH } 2413 *[3] \text { Calculus I PCE } \\ \hline \end{array}$ | 3 |  |
| $\frac{\text { CORE } 30}{}$  <br> CHEM 1411*, 1411L Chemistry I PCE <br> CHEM 1412*, 1412L Chemistry II PCE | 6 |  |
| CORE 90 <br> ENGL 2311* Introduction to Professional and Technical <br> Communication 3 |  |  |
| CORE 90   <br> MATH 2413[1], CHEM 1411L[1], CHEM 1412L[1] PCE 3 |  |  |
| CIVIL ENGINEERING REQUIREMENTS: 63 HOURS |  |  |
| ENGR 1171* Engineering Ethics | 1 |  |
| ENGR 1301*,1301L Fundamentals of Engineering PCE | 3 |  |
| ENGR 1304, 1304L Engineering Graphics PCE | 3 |  |
| ENGR 2301* Engineering Statics PCE | 3 |  |
| ENGR 2302* Engineering Dynamics PCE | 3 |  |
| ENGR 2332* Mechanics of Materials I | 3 |  |
| ENGR 3202* Fundamentals of Engineering Economics | 2 |  |
| CENG/EVEG 2331* Introduction to Environmental Engineering | 3 |  |
| CENG/EVEG 3304* Fluid Mechanics for Civil and Environmental Engineers | 3 |  |
| CENG 2361* Surveying | 3 |  |
| CENG/EVEG 3411* Water Resources Engineering | 4 |  |
| CENG 3321* Civil Construction Materials | 3 |  |

## Bachelor of Science Degree BS.CIVIL.ENGR (130) PRE.ENGR (128)

| CENG 3341* Geotechnical Engineering | 3 |  |
| :--- | :--- | :--- |
| CENG 3351* Structural Analysis I | 3 |  |
| CENG 3362* Transportation Engineering | 3 |  |
| CENG 4380* Civil Engineering Senior Design | 3 |  |
| PHYS 2425*, 2425L Calculus Physics I | 4 |  |
| CS 1315* Programming Fundamentals OR <br> CS 1337, 1337L Intro. to Object-Oriented Programming | 3 |  |
| MATH 2414* Calculus II | 4 |  |
| MATH 3340* Calculus III | 3 |  |
| MATH 3342* Differential Equations I | 3 |  |
| ELECTIVES: 21-23 HOURS | 3 |  |
| CENG structural design elective | 3 |  |
| CENG general elective | 3 |  |
| CENG design elective |  |  |
| Take one upper-level elective selected from: <br> MATH 3311* Linear Algebra <br> MATH 3343* Differential Equations II <br> MATH 4340* Complex Variables I <br> MATH 4341* Advanced Calculus <br> MATH 4361* Statistics for the Sciences <br> MATH 4362* Introduction to Numerical Analysis <br> PHYS 3310* Modern Physics I <br> PHYS 4310* Modern Physics II <br> PHYS 4330* Optics <br> PHYS 4340* Mathematical Methods <br> PHYS 4397* Advanced Physics Elective | 3 |  |
| One elective in ENGR, CENG, EENG, EVEG or MENG | 3 |  |
| Take two natural science electives from: <br> PHYS 2426; BIOL 1406, 1407*, 1411, 1413, 2420 or 2572, | $6-8$ |  |
| 4425, 4510; GEOL 1403, 1404, 2471, 2475, 3311, 3312, <br> 3350 |  |  |
| MINIMUM HOURS REQUIRED TO COMPLETE DEGREE | 126 |  |

ar Civil Engineering Program admission requirements (PCE): overall GPA of at least 2.25; completion of the pre-engineering sequence (MATH 2413, 2414, CHEM 1411, 1412, ENGR 1301, 1304, 2301, and 2302) with a GPA of at least 2.75; and successful completion of entrance interview with a department adviser.

- The core curriculum must total exactly 42 hours; excess hours must be moved to the major as an elective or a major requirement and stay within the 120-hour requirement or approved total submitted to the Coordinating Board for degree requirements. Some majors specify particular courses to meet core curriculum requirements when options are available.
* Indicates prerequisites-see catalog for more information.
** Or an equivalent course (second year, second semester) in a foreign language. NOTE: At least 39 hours of advanced work (3000- or 4000-level courses) for which tuition is paid must be earned at WTAMU; 30 of the final 36 hours counted toward the degree must be earned at WTAMU. A maximum of six semester hours in religion (RELI) and a maximum of six semester hours in physical education (PHED) courses can count toward a baccalaureate degree.

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## WTAMU ADVISING SERVICES <br> 2020-2021 Curriculum Guide

Major: Civil Engineering, B.S.


Major Code: 130

| Second Year |  |  |  |
| :---: | :---: | :---: | :---: |
| Fall |  | Spring |  |
| ENGR 1171 | 1 | ENGR 2302 | (PCE - see Note 2) |
| ENGR 2301 (PCE - see Note 2) | 3 | ENGR 2332 |  |
| MATH 3340 | 3 | MATH 3342 |  |
| PHYS 2425/2425L | 4 | CENG 2331/2 |  |
| CS 1315 | 3 | CORE - See ch | options |
|  |  | (see also Note 1 |  |
| CENG 2361/2361L | 3 |  |  |
| Semester Hours | 17 | Semester |  |


| Fourth Year |  |  |  |
| :---: | :---: | :---: | :---: |
| Fall |  | Spring |  |
| CENG Design Elective | 3 | CENG 4380 | 3 |
| CENG Elective | 3 | ENGR, EVEG or MENG Elective | 3 |
| MATH/PHYS Elective | 3 | CORE - See checklist for options | 3 |
| Take 1 course from Note 4 list below or checklist |  | (see also Note 1 below) |  |
| CORE - See checklist for options | 3 | CORE - See checklist for options | 3 |
| (see also Note 1 below) |  | (see also Note 1 below) |  |
| CORE - See checklist for options | 3 | CORE - See checklist for options | 3 |
| (see also Note 1 below) |  | (see also Note 1 below) |  |
| Semester Hours | 15 | Semester Hours | 15 |

## Degree Total Hours 120

DISCLAIMER: This curriculum guide should be used in conjunction with the corresponding degree checklist for general planning purposes only. The degree checklist (later a student's official degree plan) should be referred to as the comprehensive list of all courses required for the degree. An official degree plan is required after completing 30 hours. Students should always seek the advice of their academic adviser before scheduling classes.

## Identified Marketable Skills:

Top 3 Local Employers or Industries/Professional Programs/Possible Career Opportunities

## Prerequisites/Important Sequences/Other degree Notes:

Note 1 - CORE: Civil Engineering majors are required to take specific courses for Core 20, Core 30, and Core 90 . For all other categories, they may select from any available options (see degree checklist). Apart from the major-specific core requirements, there is no set order in which core courses must be taken.
Note 2 - (PCE): Civil Engineering Program admission requirements: overall GPA of at least 2.25; completion of the pre-civil engineering sequence (MATH 2413, 2414, CHEM 1411, 1412, ENGR 1301, 1304, 2301, and 2302) with a GPA of at least 2.75 ; and successful completion of entrance interview with a department adviser.
Note 3 - Natural Science Electives: Take two natural science electives from PHYS 2426; BIOL 1406, 1407, 1411, 1413, 2420, 2572, 4425, 4510; GEOL 1403, 1404, 2471, 2475, 3311, $3312,3350$.
Note 4 - MATH/PHYS Elective: Take one upper-level elective selected from MATH 3311, 3343, 4340, 4341, 4361, 4362; PHYS 3310, 4310, 4330, $4340,4397$.


[^0]:    Note: This is NOT a degree plan. Upon completing 30 credit hours, students must request an official degree plan (using the online Degree Plan Request form) in order to progress. Students who have questions about their degree plan should contact the office of the dean of the Paul Engler College of Agriculture and Natural Sciences, which is located in the Happy State Bank Academic \& Research Building, Suite 262 (phone 806-651-3570).

