

## Prerequisite courses for non-engineers to qualify for MCE, MEVE, MSCE or MSEV degrees

Students without an ABET accredited undergraduate engineering degree who wish to qualify for the MSCE or MSEVE degree must complete the following prerequisite courses. These requirements generally conform to the Florida Board of Professional Engineering (PE) Licensure Requirements

(<http://www.fbpe.org/>). Students normally complete some of these courses prior to applying to USF and complete the remaining coursework concurrent with the master's program requirements after admission.

<b>Section 1: Basic Math and Sciences: 32 credits required</b>	Semester	Where Taken?	Grade
MAC 2281 Calculus I (4)			
MAC 2282 Calculus II (4)			
MAP 2302 Differential Equations (3)			
A Course in Statistics (3)			
PHY 2048 Calculus-based General Physics I (3)			
CHM 2045 General Chemistry I (3)			
CHM 2046 General Chemistry II <u>or</u> PHY 2049 General Physics II (3)			
Biological <u>or</u> Earth Science Course (3)			
Additional Science/Math and demonstration of laboratory experience (6)			
<b>Section 2: Core Engineering Courses: 9 credits required</b>	Semester	Where Taken?	Grade
EGN 3311 Statics (3)			
EGN 3353 Fluid Mechanics (3)			
EGN 3615 Engineering Economy (3)			
<b>Section 3: Sub-discipline Area Requirements (select one)</b>	Semester	Where Taken?	Grade
<b>EVE/WR: 12 credits required</b>			
ENV 4001 Env Engineering I (3)			
CWR 4202 Hydraulics (3)			
ENV 4417 Water Quality & Tmt. OR CWR 4540 Water Resources Eng. (3)			
CWR 4812/Env 6564 Capstone WR/EVE Design (3)			
<b>MAT: 12 credits required</b>			
EGN 3321 Dynamics (3)			
EGN 3331 Mechanics of Materials (3)			
EGN 3365 Materials Engineering I (3)			
EGN 3373 Electrical Systems (3)			
<b>TTE: 12 credits required</b>			
EGN 3331 Mechanics of Materials (3)			
TTE 4004 Transportation Engr I (3)			
TTE 4005 Transportation Engr II (3)			
CEG4850 Capstone GEO/TTE Design (3)			
<b>GEO/STR: 12 credits required</b>			
EGN 3331 Mechanics of Materials (3)			
CEG 4001 Geotechnical Eng I (3)			
CES 3102 Structures (3)			
CES 4750 Capstone STR/GEO (3)			

**STR** = structural engineering, **GEO** = geotechnical engineering, **MAT** = materials engineering, **EVE** = environmental engineering, **WR** = water resources engineering, **TTE** = transportation engineering