

Name (please print): _____
(Last) (First) (Middle)

Student Number: _____

Primary Major: _____ Expected Major Completion Term: _____

Required Courses (Select 4-6 credits):

- _____ ENT 1960 Alternative Fuels Group (1)
- _____ ENT 2950 Alternative Fuels Group (1)
- _____ ENT 2960 Alternative Fuels Group (1)
- _____ ENT 3950 Alternative Fuels Group (1)
- _____ ENT 3960 Alternative Fuels Group (1)
- _____ ENT 4900 Alternative Fuels Group (2)
- _____ ENT 4910 Alternative Fuels Group (2)
- _____ ENT 4950 Alternative Fuels Group (2)
- _____ ENT 4960 Alternative Fuels Group (2)
- _____ ENT 4961 Alternative Fuels Group (1)

Select one course from the list below:

- _____ CM/ENT 3974 Fuel Cell Fundamentals (1)
- _____ MEEM 4260 Fuel Cell Technology (3)

Select at least one course from the list below:

- _____ CM/ENT 3977 Fund. of Hydrogen as an Energy Carrier (1)
- _____ CM/ENT 3978 Hydrogen Measurements Laboratory (1)

Elective Courses: Select remaining credits from the list below:

- _____ CM 3110 Transport/Unit Operations I (3)
- _____ CM 3120 Transport/Unit Operations II (3)
- _____ CM 4000 Chemical Engineering Research (1-3)**
- _____ CM 4310 Chemical Process Safety/Environment (3)*
- _____ CM 4550 Industrial Chemical Production (3)
- _____ EC 4620 Energy Economics (3)*
- _____ EE 2110 Electrical Circuits (3)
- _____ EE 3010 Circuits and Instrumentation (3)
- _____ EE 3120 Introduction to Energy Systems (3)
- _____ EE 3221 Introduction to Motor Drives (3)
- _____ EE 4000 Electrical Eng. Undergraduate Research (1-4)**
- _____ EET 2120 Circuits II (4)
- _____ EET 3131 Instrumentation (3)
- _____ EET 3390 Power Systems (3)
- _____ ENG/SS 4510 Sustainable Futures I (3)*
- _____ ENG/SS 4520 Sustainable Futures II (3)*
- _____ ENT 3956 Industrial Health and Safety (2)*
- _____ ENT 3975 Intro to Vehicle Design & System Modeling (1)

Elective Courses (Continued)

- _____ MEEM 3210 Fluid Mechanics (3)
- _____ MEEM 3230 Heat Transfer (3)
- _____ MEEM 3999 MEEM Undergrad Research Proj. (3)**
- _____ MEEM 4220 Internal Combustion Engines I (3)
- _____ MET 3250 Applied Fluid Mechanics (4)
- _____ MET 4300 Applied Heat Transfer (3)
- _____ MET 4390 Internal Combustion Engines (3)
- _____ MET 4900 Alternative Energy systems (3)
- _____ MY 3100 Materials Processing I (4)
- _____ MY 3110 Materials Processing II (4)
- _____ MY 4140 Science of Ceramic Materials (3)
- _____ MY 4990 MSE Undergraduate Research (1-6)**
- _____ SS 3800 Energy Technology and Policy (3)*

***Students are encouraged, though not required, to take at least one of these courses relating to the broader context and societal impacts of hydrogen technology.**

**** Topics must be approved by the minor program coordinator.**

Courses listed in this minor have the following prerequisites (shown in parenthesis). Concurrency is illustrated by the letter C: ENT4961 (ENT3950 and ENT3960 and ENT4950 and ENT4960), CM/ENT3974 (CH1100 or CH1110 or CH1150), CM/ENT3977 (PH2200 and (CH1100 or CH1110 or CH1150)), CM/ENT3978 (PH2200 and (CH1100 or CH1110 or CH1150)), CM3110 (CM2120 and PH2100 and (MA3520 or 3521 or 3530 or 3560)), CM3120 (CM3110 and (MA3520 or 3521 or 3530 or 3560)), CM4310 (CM3120 and CM3130), CM4550 ((CH2400 or CH2410) and CM3510 (C)), EC4620 ((EC3001 or EC3002 or EC3003) and UN2002), EE2110 (EE2150 and (MA3520 or 3521 or 3530 or 3560)), EE3120 (EE2110 or EE3010), EE3221 (EE2110 or EE3010), EET2120 (EET1120 and (MA1161 (C) or MA1161(C)), EET3131 (EET1141 or EET2311 or EET2220), EET3390 (EET2233), ENG/SS 4510 (UN2002), ENT3975 (ENG1102), MEEM3210 (MEEM2200 and MEEM2700 (C)), MEEM3230 (MEEM3210 and (MA3520 or equivalent)), MEEM4220 (MEEM3210), MET3250 (MET2130), MET4300 (MET3600), MET4390 (MET3600 (C)), MET4900 (JMET3600), MY3100 (MY2100), MY3110 (MY3100), MY4140 (MY2100), MY5410 (MEEM2200 or MY3100 or CM3230), SS3800 (UN2002)

Refer to the University Catalog for information on university minor requirements.

Credits Required = 16

Total Credits _____

Student Signature

Date

Minor Advisor Signature

Date