EME M.S. and Ph.D Degree Course Requirements

Minimum Total M.S. Course Credits (24 credits)
Minimum Total M.S. Research Credits (6 credits)

Minimum Total Ph.D. Course Credits – beyond M.S. (12 credits)
Minimum Total Ph.D. Research Credits (12 credits)

Core Program M.S. Course Credits (7 credits)
EME 580 (3 credits); EME 500 (3 credits); EME 590 (1 credit)

Core Program Ph.D. Course Credits beyond M.S. (4 credits)
EME 581 (3 credits); EME 590 (1 credit)

Option 1
Petroleum and Natural Gas Engineering (PNGE)

Option 2
Mining and Mineral Process Engineering (MMPE)

Option 3
Environmental Health and Safety Engineering (EHSE)

Option 4
Fuel Science (FSc)

Option 5
Energy Management and Policy (EMP)

Base Program (no option)

Required Option Course Credits (12)
PNG-501 or 502 and 511 or 512 and 520 and 530

Required Option Course Credits (12)
MNG-515 or 541 or 554 and MNP 501 or 505 or 506 and Two of the above four not taken

Required Option Course Credits (12)
EME 510 and STAT 501 or 502 and BBH 503 or IE 553 and One of the above not taken

Required Option Course Credits (12)
FSC 504 and FSC 506 and EME 570 and FSC 503

Required Option Course Credits (15)
EME 525 and AER 519 and AER 510 and ENNEC 540, or ENNEC 560 and One other

At least 18 of the required 24 course credits for the M.S. degree must be at the 500-level. Students are not required to choose an option. However, students who desire more specific disciplinary identity may choose from among the five options. Students may however elect to have the option only for either the M.S. or Ph.D. degree but not both. All graduate students are required to attend the colloquium EME 590 whether they are taking it for credit or not.

Figure 1. Flowchart of EME Graduate Program Course Requirements