

Mechanical Engineering Technical Electives

Spring, 2009—Tentative

ME 404	Technology Ventures	3	Elger
ME 404	Computational Synthesis	3	McCormack
ME 413/513V	Engineering Acoustics	3	Anderson
ME 417/517	Turbomachinery	3	Gunnerson
ME 420/520V	Fluid Dynamics	3	Budwig
ME 421/521	Advanced Computer-Aided Design	3	Beyerlein
ME 444V	Air Conditioning Engineering	3	Steciak
ME 461V	Fatigue and Fracture Mechanics	3	Potirniche
ME 534V	Mechanics of Composite Materials	3	Blackketter

- With prior departmental approval, a 500-level course may be used as a technical elective.
- If the student's curriculum requires ME 323, which is no longer taught, up to 3 credits of Math/Stat may be substituted for that course.
- Students who entered Fall 2005 and whose curriculum requires 12 credits of TE may use up to 3 credits of Math/Stat as a TE.

Technical Elective Changes, December 6, 2005

By a vote of the ME faculty, the following change for the 2006-2007 catalog is approved for students **on the 2006 or newer catalog only**.

Required Technical Electives—12 credits

Six (6) credits must be from this list:

Mechanical Engineering (ME) 404, 409, 410, 411, 412, 413/513, 414/514, 415, 417/517, 418/518, 420/520, 422, 433, 443/543, 444, 451/551, 461, 472, 473, 477/577, 481, 525, 526, 527, 529, 534, 535, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 557, 572, 573, 575, 578, 580, 581, 582, 583, 585.

Six (6) credits must be from this list:

Mechanical Engineering (ME) 307*, 308*, 407*, 408*, 401(s), 409, 410, 411, 412, 413/513, 414/514, 415, 417/517, 418/518, 420/520, 422, 433, 443/543, 444, 451/551, 461, 472, 473, 477/577, 481, 499, 525, 526, 527, 529, 534, 535, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 557, 572, 573, 575, 578, 580, 581, 582, 583, 585

Engineering (ENGR) 360

Math (MATH) 330, 371, 420, 432, 433, 437, 451, 452, 453, 471, 472, 480

Statistics (STAT) 301, 401, 446

Physics (PHYS) 305, 351, 352, 371, 411, 412, 425/525, 428/528, 431, 443/543, 444/544, 463, 465/565, 484/584

Business (BUS) 414, 456, 531

Any approved 400-500 level course in another engineering discipline.

*No more than three (3) total credits from these courses can be counted toward this requirement.

Rationale

Under previous scenarios it would be possible for an ME student to take only one (1) traditional (lecture-based) mechanical engineering technical elective. This sequence requires that a minimum of two (2) electives be traditional (lecture-based) technical electives. The open TE also has been broadened to include approved upper-division Physics courses and selected Business courses.