A student wishing to take courses not on this list must secure advance approval from the department by means of a petition. See your advisor about courses 593, 693, 793, and 699 outside the ECE department.

Electrical Engineering Specialization
Biomedical Engineering: BIOMEDE 500, 571, 600, 631, 686, 701, 721, 732, 733, 739, 741, 761, 762, 763, 771.
Business: BUSADM 555, BUSFIN 510, 590, and 620. BUSMGT 630, BUSML 490, 650. BUSMHR 490, 590, 660, 701 are especially appropriate for students interested in entrepreneurship or a subsequent business degree.

Chemical and Biomolecular Engineering: CHBE 769 (cross-listed with BIOMEDE 761).
Chemistry: CHEM 251 through 255.

Computer Science and Engineering: CSE 214, 230, or 502, 421, any 500-level or above course (excluding CSE 668, 675.01, 675.02 and 676 and 779) that is not directly comparable to an ECE course.

Engineering: Engineer 658 and 659.01 (if not used for ECE 582). Engineer 659.02 (if not used for ECE 682), Engineer 680

Industrial and Systems Engineering: ISE 350, 410, 600, 752.01, 601, 681, 682.

Mathematics: MATH 512; 513 or 551; 514, 552 or 654; 566; 569, 572 or 601; and 602. Note that you cannot double-count a particular math course as both a selected core course and an outside technical elective. Math 530, 568 and 571 may not be used as outside technical electives.

Mechanical Engineering: Any MECHENG 500-level or above course* (excluding 571, 773) which is not directly comparable to an ECE course. *May use up to 6 hours in 580 and up to 4 hours in 652.

Nuclear Engineering: Any NUCLREN 500-level or above course. 505 is especially appropriate for students with power interests.
Physics: Any PHYSICS 500-level or above course (excluding 517, 525, 555, 596, 617, 656, 657, 670, and 795) that is not directly comparable to an ECE or other engineering course.

Statistics: STAT 428. STAT 427 may not be used as an outside technical elective.

Computer Engineering Specialization: Often after students have completed 15 hours of ECE courses and 12 hours from the prescribed list of technical electives, there will be additional hours of the 24-33 hour requirement left.

Biomedical Engineering: BIOMEDE 500, 571, 600, 631, 686, 701, 721, 732, 733, 739, 741, 761, 762, 763, 771.
Business: BUSADM 555, BUSFIN 510, 590, and 620. BUSMGT 630, BUSML 490, 650. BUS MHR 490, 590, 660, 701 are especially appropriate for students interested in entrepreneurship or a subsequent business degree.

Chemical and Biomolecular Engineering: CHBE 769 (cross-listed with BIOMEDE 761).
Chemistry: CHEM 251 through 255.

Computer Science and Engineering: CSE 421 and any 500-level course or above (excluding CSE 502, 548,668, 675.01, 675.02, 676, and 779) this is not directly comparable to an ECE course. Please note that CSE 214, 230, and 502 DO NOT count for outside technical electives in this specialization.

Engineering: Engineer 658 and 659.01 (if not used for ECE 582). Engineer 659.02 (if not used for ECE 682), Engineer 680

Industrial and Systems Engineering: ISE 350, 410, 600, 752.01, 601, 681, 682.

Mathematics: MATH 512; 513 or 551; 514, 552, or 654; 566; 569, 572 or 601; and 602. Note that you cannot double-count a particular math course as both a selected core course and an outside technical elective. Math 530, 568 and 571 may not be used as outside technical electives.

Mechanical Engineering: MECHENG Any 500-level or above course* (excluding 571, 773) which is not directly comparable to an ECE course. *May use up to 6 hours in 580 and up to 4 hours in 652.

Nuclear Engineering: Any NUCLREN 500-level or above course. 505 is especially appropriate for students with power interests.
Physics: Any PHYSICS 500-level or above course (excluding 517, 525, 555, 596, 617, 656, 657, 670, and 795) that is not directly comparable to an ECE or other engineering course.

Statistics: STAT 428. STAT 427 may not be used as an outside technical elective.