School of Engineering and Engineering Technology

ELECTRICAL & COMPUTER ENGINEERING, B.S. BIOMEDICAL ENGINEERING CONCENTRATION (ECBM)

2024-25

APPROVED ELECTIVES LIST

(Version date: 5/12/2024)

GENERAL EDUCATION and LETU THEOLOGY AND VOCATION ELECTIVES

Biblical Engagement Electives

Any BIBL course numbered 2000-level or above

Civic Engagement Electives

Any HIST, INTL, POLS, ECON, or CRIJ

Humanities & Fine Arts Electives (Formerly Ingenuity Electives)

Cross-Cultural (CCLT 3203 only); Fine Arts (HUMA); Literature (All ENGL 2000-level or above courses *except* ENGL 2603, ENGL 3213, ENGL 3223, ENGL 3931, ENGL 4923, and ENGL 4933); Philosophy (PHIL); Music (MUSC); Foreign Language.

Theological Engagement Electives

2000-level or above BIBL; CCLT 3103 Cultural Anthropology; CCLT 3203 Religions of the World; CCLT 4103 Biblical and Strategic Paradigms for Mission; CMIN 3303 Evangelism and Discipleship; CMIN 3403 Ministry of Teaching; THEO 3063 Christian Ethics; THEO 3103 Christian Doctrine; THEO 3133 The History of Christian Thought; THEO 3203 Christian Apologetics; THEO 49X3 Special Topics classes that engage Theology and specific disciplines

DISCIPLINE SPECIFIC ELECTIVES

Note: All discipline specific engineering elective credits require advisor approval. Ensure that you speak to your advisor about elective credit selections BEFORE you enroll in a course!

Math Elective

3 hrs approved elective credit required; select one of the following MATH courses:

MATH 2303 Linear Algebra MATH 4403 Numerical Analysis

See other side for Technical Elective

Approved Technical Elective Courses for ECBM concentration

Approved engineering course or COSC course (3 hrs required)

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COSC 2103 Computer Science II

EEGR 3314 Electronics and Lab

EEGR 3523 Mechatronics

EEGR 4900 – 4993 Special Topics Course (available courses will vary by semester)

ENGR 2313 Materials Engineering

ENGR 4951 Junior Design Project I (1 hr)

ENGR 4952 Junior Design Project II (2 hrs)

MCHR 4413 Robotics
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Special topics courses offered by the School of Engineering will be evaluated on a course-by-course basis as to their suitability for the Technical Elective credit. Students should discuss eligibility of the course before enrolling.

NOTE: Not all of the courses listed above are 3 credits hrs. It is up to you as the student to ensure you have at least 3hrs total credit for your technical electives.