School of Engineering and Engineering Technology

ELECTRICAL & COMPUTER ENGINEERING, B.S. MECHATRONICS CONCENTRATION (BSMC)

2021-22

APPROVED ELECTIVES LIST

(Version date: 5/14/2018)

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 2313 Criminal Law; CRIJ 3213 Justice and Human Rights; CRIJ 3263 Constitutional Criminal Procedure; CRIJ 4233 International Human Trafficking; CRIJ 4263 International Criminal Law

Ingenuity Electives

Cross-Cultural (CCLT 3203 only); Fine Arts (HUMA); Literature (All ENGL 2000-level or above courses *except* ENGL 2011, ENGL 2603, ENGL 3213, ENGL 3223, ENGL 3403, ENGL 3413, ENGL 3923, ENGL 4023, and ENGL 4931); Philosophy (PHIL); Music (MUSC); and Foreign Language (must have two semesters in one 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; CMWA 4103 Worship Arts as Spiritual Formation; THEO 3003 History of the Church; THEO 3063 Christian Ethics; THEO 3203 Christian Apologetics; THEO 4103 Christian Doctrine 1; 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

Catalog Requirement:

Approved engineering course or Computer Science course (3 hrs.)

See other side for Technical Electives

Approved Technical Elective Courses

Catalog Requirement:

Any approved engineering course or COSC course

Approved engineering course or COSC course (3 hrs required)

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Any BEGR 3000+, CVGR3000+, EEGR 3000+, ENGR 3000+, MEGR3000+, MJEG 3000+ course
BEGR 2503 Introduction to Bioinstrumentation
COSC 2103 Computer Science II
ENGR 2313 Materials Engineering
ENGR 4951 Junior Design Project I
ENGR 4952 Junior Design Project II
MEGR 3713 Thermodynamics
MJET 2023 Materials Joining Fundamentals
MJET 2021 Materials Joining Fundamentals Laboratory
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Special topics courses offered by the Engineering Department and Mechanical Engineering Department will be evaluated on a course by course basis as to their suitability for General Elective credit. Students should discuss eligibility of the course as Technical Elective credit 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.