Mechanical Engineering (2020-2021 Catalog) ROBOTICS TRACK (128 credits minimum) See catalog for official degree requirements. Course requisites are subject to change as they are specific to academic year, not the catalog year. All courses listed on the flowchart must be successfully completed. Underlined courses are only offered in the semester they are listed. Sophomore Junior Freshman Senior 16 16 17 16 17 17 15 15 ME 406 (3) ES 320 (2) ME 302 (3 Robotics II and ES 321 Lab (1) MA 241 (4 MA 242 (4) MA 243 (4 Robotics Intro Lin & 406L lab (1) **Eng Materials** HU/SS Upper Calc 1 Calc 2 Calc 3 and 302L Abstract Alc PR is also Science PR is Level (3) from: Lab (1) ES204 PR is MA 242 CHM 105, CHM HU 330 or 110/110L or HU 399 (Study CHM 113 Abroad only) ø MA 345 (4) CHM 113 (3) PR is any HU LL Differential or HON course Chemistry for PS 161 (4) PS 250 (3) AE 430 (3) **Equations** Engineers **Physics** Physics 3 Controls 1&11 EGR 101 (2) EE 335 (2) Intro to EE 336 Lab (1) ME 404 (3) PS 253 (1) Engineering Electrical Eng Mechatronics and Physics Lab ME 420 (4) ME 407 (4) CEC 220 (3) [or EE 223/224 (4)] 404L Lab (1) CEC 222-lab Prelim# Detail# PR is also CEC (1) Digital 220+222 CS 125 (3) CS Gen Ed (3) Circuits 125L Lab (1) EGR 115 (3) SELECT Comp Science 1 ONE: Intro to HU/SS/ Computing COM 430 (2) COM 420 (1) PSY/RS/EC Adv Tech ⋖ Adv Tech Comm 1 1xx/2xx or EGR 201 (3) ES 204 (3) Comm 2 L3xx/4xx PR is also COM 221 Solidworks **Dynamics** ES 202 (3) Solid UNIV 101 (1) ES 201 (3) Mechanics ME 400 (3) College Statics Vibration & Success ME 304 (3) and **Ascoustics** ME 200 (1) PR also ES 204 305 Lab (1) ES 206 (3) and MA 345 Machine Shop Machine Design Fluid Lab PR is also EGR Mechanics ES 205 (3) 201 PR is also MA 242 ES 403 (3) Thermo COM 221 (3) Heat Transfer CEME 396 (3) Tech Report COM 122 (3) PR is also MA 345 Coop / Internship Writing English OR TECH ELECTIVE CEME 396 (3) (PR for all ES lab (AF 3XX/4XX or MSL Composition Coop / Internship courses and COM EC 225 (3) HU 1xx/2xx 3XX/4XX) OR TECH ELECTIVE 420 (3 credits) Engineering (AF 3XX/4XX or MSL **Economics** Humanities (lower 3XX/4XX) PR is MA 241 level) PRE-Rea CO-Rea - - -#Robotics students Explore co-op opportunies early in your academic career (after completion of Critical Path have two additional Freshman year) for best results. If the co-op course is taken during the semester indicated on this chart, graduation will be delayed while the student completes choices for their Grade of C or better required in See your academic capstone sequence the remaining courses listed in the semester. Consider completing co-op or all prerequisites for AE, EGR, EP, advisor early and often if internship in summer. ES, ME and SYS courses. you have any questions or

Updated February 2020

Technical Electives: Please see Course Catalog for additional options. These options should be explored if: a) You have unsuccessfully explored co-op opportunities, or b) You prefer to pursue undergraduate research opportunities, or c) You wish to pursue depth in a particular technical area.

(prelim and detail):

need assistance with

academic planning

Astro: AE 427, AE 445 Aero: AE 420, AE 421