

Meng Course Advising Sheet

Civil / Electrical / Mechanical Engineering - MEng Program, 2023-24

Eligibility to register in 2023 Winter (September 2023 – April 2024)

Version 1h

Program Requirements	<ul style="list-style-type: none"> • Successful completion of 30 credits of coursework • 24 credits must be Graduate level courses from the SOE (ENGR 5**, APSC 5**, MANF 5**) • 12 credits must be within your preferred discipline (CIVIL, ELEC, MECH)
Grade Requirements	<ul style="list-style-type: none"> • May have up to 6 course credits with grades between 60% and 67% inclusive • If you have 6 credits of coursework in the 60 -67% range, all other grades must be a minimum of 68% • In any circumstance, under 60% is a failure • Students receiving grades below 68% in any of their Winter term 1 courses are requested to meet with the program coordinator Dr. Rudolf Seethaler during the first week of classes in January in order to discuss course selection for their remaining program.
Undergraduate courses	<ul style="list-style-type: none"> • A maximum of 6 credits of undergraduate courses may be counted towards your degree requirements (ENGR 3**, ENGR 4** or MANF 4**) • All ENGR 4** are pre-approved as non-discipline specific courses • ENGR 3**, MANF 3**, MANF 4** that are not individually approved in writing by the Program Coordinator Dr. Rudolf Seethaler (rudolf.seethaler@ubc.ca) may not count towards your degree. Courses similar to others courses already taken at UBC or at other institutions will not be approved. • Due to the low number of summer courses, and one of them being ENGR 413, students can only take one 400 level course during the winter terms. • For courses with prerequisites, students must email Engineering.graduate@ubc.ca with the course number and their student number so graduate staff can assist with course registration.
General Course Information	<ul style="list-style-type: none"> • Courses listed on this advising sheet do not require approval by the Program Coordinator • Students are allowed a maximum of 6 credits in ENGR 598. • Students are allowed a maximum of 6 credits taken outside of ENGR/APSC/MANF. (requires instructor and program coordinator approval) Form: https://gradstudies.ok.ubc.ca/resources/forms/registration-audit-form/ • Courses in preferred disciplines are only offered during Winter terms 1 and 2 Over the Summer terms 1 and 2, a minimum of four common courses will be offered

General Course Information (continued)	<ul style="list-style-type: none"> Students are asked to enroll in three courses each Winter term, and two courses each summer term. Registering in more courses blocks seats for other students The MEng advising sheet changes annually. Courses offered this year may not be offered in subsequent years. If a course switches between programs between years, the student should refer to the sheet from the year the course was taken to know how it will be used to fulfill their degree requirements. Courses are subject to minimum and maximum enrolments. The School of Engineering reserves the right to cancel a course if the minimum enrolment is not met. If a course is cancelled, you will be notified via e-mail. Check the UBC Student Service Centre to see the course availability. Course descriptions, can be found on the Academic Calendar: ENGR - Engineering - UBC Student Services Term dates can be found on the Academic Calendar: Dates and Deadlines - Okanagan Academic Calendar 2022/23 - UBC Student Services
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SUGGESTED COURSE REGISTRATION CHART

2023 Winter		2024 Summer	
Term1	Term 2	Term 1	Term 2
3 courses	3 courses	2 courses	2 courses

COURSES NOT ASSIGNED TO A SPECIFIC DISCIPLINE

<u>Winter, Term 1</u> ENGR 4**, other than ENGR 413 IMTC 505 Fundamentals of Immersive Technologies (restricted to students admitted to the CITECH program) IMTC 506 User-Centered Immersive Design (restricted to students admitted to the CITECH program)	<u>Winter, Term 2</u> ENGR 4**, other than ENGR 413 ENGR 511 Technology Entrepreneurship for Engineer IMTC 507 Immersive Technology Design Studio (restricted to students admitted to the CITECH program) MANF 486, Mechatronic Systems Laboratory (requires ENGR 581 as a prerequisite)
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Anticipated Summer Term courses

ENGR 413 Law and Ethics for Engineers
 ENGR 544 Life Cycle Assessment and Management
 ENGR 589 Multicriteria Optimization and Design of Experiments
 APSC 501 Professional Communication for Engineering Leaders
 APSC 505 Engineering Leadership

Note: Courses listed for the Summer Terms cannot be taken in the Winter Terms

CIVIL ENGINEERING

Winter, Term 1

APSC 509 Construction Supply Chain Digitalization and Informatics
APSC 547 Advanced Drinking Water Treatment
ENGR 528 Earthquake Engineering
ENGR 533 Construction Engineering and Management
ENGR 534 Road Safety Planning and Engineering
ENGR 536 Sustainable Land Use and Transportation

Winter, Term 2

APSC 514 Precast Concrete Structures
ENGR 522 Advanced Design of Steel Structures
ENGR 523 Seismic Design of Buildings
ENGR 529 Rehabilitation of Concrete Structures
ENGR 532 Project Planning and Control

ELECTRICAL ENGINEERING

Winter, Term 1

ENGR 518 Applied Machine Learning for Engineers
ENGR 553 Signal Estimation Theory
ENGR 558 Power Electronics
ENGR 564 Fundamentals of Digital Communications
ENGR 568 Advanced Digital System Design
ENGR 574 Antennas and Propagation
ENGR 580 Modern Control

Winter, Term 2

APSC 504 Solar Cell Engineering
APSC 519 System Identification
ENGR 501 Deep and Reinforcement Learning for Engineers
ENGR 535 Autonomous Vehicle Technology
ENGR 572 Fibre Optics and Photonics
ENGR 587 Digital Control
ENGR 598C Biophotonic Engineering

MECHANICAL ENGINEERING

Winter, Term 1

ENGR 518 Applied Machine Learning for Engineers
ENGR 580 Modern Control
ENGR 581 Mechatronics
ENGR 584 Heat and Mass Transfer
MANF 555 Factory Planning
MANF 560 Supply Chain Tactics and Strategies

Winter, Term 2

APSC 504 Solar Cell Engineering
APSC 519 System Identification
MANF 516 Advanced Manufacturing
ENGR 519 Tissue Engineering
ENGR 535 Autonomous Vehicle Technology
ENGR 545 Laser-Based Measurements of Fluid Flows
ENGR 563 Advanced Polymer Science and Engineering
ENGR 582 Finite Element Method
ENGR 583 Multiphase Flow
ENGR 587 Digital Control