Department of Biology
Biotechnology - Specialization

Wondering what courses to take?

(BTEC-P-BSH)

Year One:
F  Introductory Biology of Cells (BIOL-102)
FW  Calculus (MATH-121 or 120 or (MATH 123 & 124))
FW  General Chemistry (CHEM-112 or 116)
W  Introductory Biology of Organisms (BIOL-103)

Plus elective courses

Year Two:
F  Mendelian & Molecular Genetics (BIOL-205)
F  Data Management (BIOL-243) or (PSYC-202)
FW  2nd year Chemistry
F&W  6.0 units BIOL OR BIOMED & MOLECULAR SCI Option List
W  Evolutionary Genetics (BIOL-206)
W  Molecular Biology (BCHM-218)

Plus elective courses

Year Three:
F&W  6.0 units Animal Physiology (BIOL-339); Plant Physiology (BIOL-341); Comparative Biochemistry (BIOL-334)
F  Cell Biology (BIOL-330)
FW  12.0 units BTEC BIOL List
F&W  Experimental Approaches to Animal Physiology (BIOL-401) or Experiments in Plant Physiology (BIOL-402)
W/S  Frontiers in Cell and Molecular Physiology (BIOL-403) or Techniques in Molecular Biology (BIOL-404)

Plus elective courses

Year Four:
 Students have the option of completing:
F&W  18.0 units BTEC BIOL; BTEC Options
F&W  Research in Biology (BIOL-537); Research in Biotechnology (BIOL-541) PLUS
FW  6.0 units BTEC BIOL; BTEC Options
FW  3.0 units Biotechnology and Society (BIOL-360); Plant Biotechnology (BIOL-503); Biotechnology (BIOL-507); Current Topics in Biochemistry (BCHM-441)

Plus elective courses

Research Honours Thesis Project (BIOL-537) OR (BIOL 541) Capstone undergraduate experience, which offers complete immersion in the research process. Thesis students design and execute their own projects by working in our laboratories with faculty, graduate students, and other research personnel. Students experience all elements of research including identification of the scientific question, experimental design, poster and oral presentations, a written thesis, and a formal defense.

visit: http://www.queensu.ca/artsci for details on all plans
F (fall term), W (winter term), FW (both fall and winter terms)

Department of Biology
Looking for suggestions?


Plant Sciences stream—suggested courses: Ecology (BIOL-302), Plant Physiology (BIOL-341), Genomics (BIOL-331), Techniques in Molecular Biology (BIOL-404), Plants for People (BIOL-315).


BTEC_Biology
BIOL 315/3.0; BIOL 331/3.0; BIOL 333/3.0; BIOL 344/3.0; BIOL 334/3.0; BIOL 339/3.0; BIOL 341/3.0; BIOL 360/3.0; BIOL 401/3.0; BIOL 402/3.0; BIOL 403/3.0; BIOL 404/3.0; BIOL 409/3.0; BIOL 430/3.0; BIOL 431/3.0; BIOL 441/3.0; BIOL 503/3.0; BIOL 506/3.0; BIOL 507/3.0; BIOL 508/3.0

BTEC_Options
BCHM 315/3.0; BCHM 316/3.0; BCHM 410/3.0; BCRM 441/3.0; BCRM 411/3.0; BCRM 432/3.0; CHEE 229/3.0; CHEE 342/3.0; CHEE 380/3.0; CHEE 405/3.0; CHEE 440/3.0; CHEE 450/3.0; CHEE 484/3.0; DDHT 459/3.0; DDHT 460/3.0; MICR 221/3.0; MICR 360/3.0; MICR 435/3.0; MICR 451/3.0; MICR 455/6.0; MICR 461/3.0; PHAR 270/3.0; PHAR 340/3.0; PHAR 416/3.0; PHAR 450/3.0

Suggested First Year Electives
GEOL-107 History of Life
PSYC-100 Psychology
PHYS-107 Introductory Physics
ENGL-110 Introduction to English Literature
ENGL-168/169 Modern Literature in English
GEOL-105 Environmental Geology
GPHY-100 Geography and the Environment

For more information, including detailed information on requirements for biology degree programs as well as biology courses that can be used to fill option courses in upper years, please refer to the Faculty of Arts and Science Calendar.