

B.Ed. in Teaching and Learning at the Secondary Level Program Overview (Science and Technology Profile)

Overview of Total Program Credits

In order to earn a Bachelor of Education in Teaching and Learning at the Secondary Level, students must complete a 150-credit program. Students entering with a DEC from a Quebec CEGEP will normally be awarded 30 advanced credits. Mature students and students transferring from another university may be awarded certain advanced credits. Students entering without a completed DEC from a Quebec CEGEP and without any advanced credits are required to earn a total of 30 elective credits in addition to the 120 credits plus labs listed below.

Foundational Courses (30 credits + 2 Labs)

Required Courses:

EDU 102 Philosophy of Education
EDU 122 Using Technology to Support Learning
EDU 203 Educational Psychology
EDU 205 Education, Colonialism and De-Colonization
EDU 239 Teaching and Learning at the Secondary Level: Practice and Reflection
EDU 305 Social Justice and Anti-Discrimination Education
EDU 315 Applying the Psychology of Learning and Motivation to the Design of Learning Environments
EDU 349 Professional Seminars Lab (1 credit)
EDU 401 Quebec Education Policy and Law
EDU 407 Individual Differences
ILT 101 Information Literacy Critical Thinking Lab (1 credit)

One of:

EDU 204 Indigenous Education
EDU 211 Introduction to Young Adult Literature and Texts "Beyond the Canon"
EDU 214 Gender and Sexuality in Education
EDU 218 History of Education
EDU 219 Getting dirty: Hands-on, experiential teaching and learning for elementary and secondary student
EDU 220 Linguistic Diversity
EDU 221 Methods in Plurilingual and Pluricultural Teaching and Learning
EDU 222 Teaching and Learning Online
EDU 240 Readings to Support Education Thinking
EDU 285 The Reading Process
EDU 303 Sociology of Education

Methods Courses (18 credits)

EDU 339 Effective Teaching and Evaluation Methods I
EDU 346 Methods in Teaching Mathematics, Science and Technology at the Secondary Level I
EDU 410 Effective Teaching and Evaluation Methods II
EDU 416 Methods in Teaching Mathematics, Science and Technology at the Secondary Level II
EDU 420 Interdisciplinary Teaching and Integration of Learning at the Secondary Level (6 credits)

Practica (24 credits)

EDU 129 Practicum I: Orientation to Professional Practice (Secondary)

EDU 229 Practicum II: Initiation to Working With and For Students (Secondary)

EDU 329 Practicum III: Professional Practice (Secondary) (6 credits)

EDU 429 Practicum IV: Internship (Secondary) (12 credits)

Disciplinary Courses (48 credits + labs + 21 prerequisite credits)

Students entering this profile must first complete or have credited the following prerequisites:

BIO 196 Introductory Biology I: Introduction to Cellular and Molecular Biology (with lab BIL 196)

CHM 191 General Chemistry I (with lab CHL 191)

CHM 192 General Chemistry II (with lab CHL 192)

MAT 191 Calculus I

MAT 192 Calculus II

PHY 191 Introductory Physics I – Mechanics (with lab PHL 191)

PHY 192 Introductory Physics II – Electricity and Magnetism (with lab PHL 192)

Required Courses:

BIO 201 Cellular and Molecular Biology

BIO 205 Animal Diversity (with lab BIL 205)

BIO 233 Human Anatomy

CHM 121 Inorganic Chemistry I

CHM 141 Analytical Chemistry (with lab CHL 141)

EDU 326 Engineering for Science and Technology Teachers

ESG 127 Living in the Environment

PHY 101 Statistical Methods in Experimental Sciences

PHY 206 Waves, Optics and Modern Physics (with lab PHL 206)

PHY 207 Thermal and Fluid Physics

PHY 214 Astronomy & Astrophysics

One of:

ESG 265 The Atmosphere and Weather

ESG 367 Climate Change

Four of:

BCH 210 General Biochemistry

BIO 206 Plant Diversity (with lab BIL 206)

BIO 207 Introduction to Evolution and Ecology

BIO 208 Genetics (with lab BIL 208)

BIO 320 Programmed Cell Death

BIO 327 Advanced Ecology

BIO 329 Invertebrate Biology (with lab BIL 329)

BIO 331 Freshwater Biology

BIO 336 Animal Physiology I

BIO 341 Population genetics and evolution
BIO 349 Medical and Forensic Entomology
BIO 354 Insect Biodiversity
BIO 358 Animal Behaviour
BIO 359 Human Genetics
CHM 111 Organic Chemistry I: Introductory (with lab CHL 111)
CHM 211 Organic Chemistry II: Introductory (with lab CHL 211)
CHM 225 Inorganic Chemistry II (with lab CHL 225)
CS 201 Foundations of Computer Science (with lab CSL 201)
ESG 226 Physical Oceanography
ESG 227 Biogeochemical and Environmental Oceanography
ESG 250 Geomorphology
ESG 251 Biogeography
ESG 269 The Earth's Crust
MAT 108 Matrix Algebra
MAT 200 Introduction to Discrete Mathematics
MAT 202 Modern Geometry: Euclidean to Fractal
MAT 206 Advanced Calculus I
MAT 209 Linear Algebra
PHY 208 Introduction to Mechanics
PHY 273 Observational Astronomy I

Compulsory Language Requirement

EDU 100 English Exam for Teacher Certification

(P/F, students who do not pass will not be permitted to register in the fourth practicum)