



ORIGINAL COURSE IMPLEMENTATION DATE: September 2020  
 REVISED COURSE IMPLEMENTATION DATE:  
 COURSE TO BE REVIEWED (six years after UEC approval): January 2026  
 Course outline form version: 05/18/2018

## OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

<b>Course Code and Number:</b> ELTR 160		<b>Number of Credits:</b> 3 <a href="#">Course credit policy (105)</a>															
<b>Course Full Title:</b> Project Management Methodologies and Impacts for Electronics <b>Course Short Title:</b> Project Management for Electronics <i>(Transcripts only display 30 characters. Departments may recommend a short title if one is needed. If left blank, one will be assigned.)</i>																	
<b>Faculty:</b> Faculty of Applied and Technical Studies		<b>Department (or program if no department):</b> Electronics															
<b>Calendar Description:</b> Learn about different project management frameworks as they relate to electronics projects. Get familiar with different project management software and understand the key elements and impacts of a project as well as primary methods to control changes to these elements. Explore the ways in which projects can be impacted by, and have an impact on, external entities.  Note: Students with credit for ELTR 210 cannot take this course for further credit.																	
<b>Prerequisites (or NONE):</b>		ELTR 100 and ELTR 130.															
<b>Corequisites (if applicable, or NONE):</b>		NONE															
<b>Pre/corequisites (if applicable, or NONE):</b>		ELTR 150.															
<b>Antirequisite Courses</b> <i>(Cannot be taken for additional credit.)</i> Former course code/number: <b>ELTR 210</b> Cross-listed with: Dual-listed with: Equivalent course(s): <i>(If offered in the previous five years, antirequisite course(s) will be included in the calendar description as a note that students with credit for the antirequisite course(s) cannot take this course for further credit.)</i>		<b>Special Topics</b> <i>(Double-click on boxes to select.)</i> This course is offered with different topics: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <i>(If yes, topic will be recorded when offered.)</i>															
		<b>Independent Study</b> If offered as an Independent Study course, this course may be repeated for further credit: <i>(If yes, topic will be recorded.)</i> <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes, repeat(s) <input type="checkbox"/> Yes, no limit															
<b>Typical Structure of Instructional Hours</b> <table border="1"> <tr> <td>Lecture/seminar hours</td> <td>45</td> </tr> <tr> <td>Tutorials/workshops</td> <td></td> </tr> <tr> <td>Supervised laboratory hours</td> <td></td> </tr> <tr> <td>Experiential (field experience, practicum, internship, etc.)</td> <td></td> </tr> <tr> <td>Supervised online activities</td> <td></td> </tr> <tr> <td>Other contact hours:</td> <td></td> </tr> <tr> <td><b>Total hours</b></td> <td><b>45</b></td> </tr> </table>		Lecture/seminar hours	45	Tutorials/workshops		Supervised laboratory hours		Experiential (field experience, practicum, internship, etc.)		Supervised online activities		Other contact hours:		<b>Total hours</b>	<b>45</b>	<b>Transfer Credit</b> Transfer credit already exists: <i>(See <a href="#">bctransferguide.ca</a>.)</i> <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes Submit outline for (re)articulation: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <i>(If yes, fill in transfer credit form.)</i>	
Lecture/seminar hours	45																
Tutorials/workshops																	
Supervised laboratory hours																	
Experiential (field experience, practicum, internship, etc.)																	
Supervised online activities																	
Other contact hours:																	
<b>Total hours</b>	<b>45</b>																
		<b>Grading System</b> <input checked="" type="checkbox"/> Letter Grades <input type="checkbox"/> Credit/No Credit															
		<b>Maximum enrolment (for information only):</b> 36 <b>Expected Frequency of Course Offerings:</b> Winter only <i>(Every semester, Fall only, annually, etc.)</i>															
<b>Department / Program Head or Director:</b>		<b>Date approved:</b> November 2019															
<b>Faculty Council approval</b>		<b>Date approved:</b> November 14, 2019															
<b>Dean/Associate VP:</b> John English		<b>Date approved:</b> November 14, 2019															
<b>Campus-Wide Consultation (CWC)</b>		<b>Date of posting:</b> January 17, 2020															
<b>Undergraduate Education Committee (UEC) approval</b>		<b>Date of meeting:</b> January 31, 2020															

**Learning Outcomes**

Upon successful completion of this course, students will be able to:

- Describe and apply common project management frameworks (PMI, Agile, Scrum).
- Define and apply concepts of quality assurance, continuous improvement and problem solving as it relates to electronics projects.
- Identify and examine ethical considerations as they relate to electronics projects (labour, safety, environmental, sustainability, social responsibility, ethnic/racial/cultural diversity, confidentiality/privacy, fiscal responsibility).
- List and explain the typical primary participants of a project (project manager, sponsor, stakeholder, project team member).
- Navigate and use the basic structure of project management software (Jira, Trello, SmartSheets).
- Illustrate and document project activities, tasks and reports; navigate key project documents (Gantt charts, project plan, work report).
- Develop a project charter, project plan, and project schedule.
- Recognize and discuss the relationship between time, cost and quality.
- Identify the key elements of a project (objectives, scope, risks, constraints, metrics, stakeholders, team composition, schedule, budget, integration, quality) and primary methods to control changes to these elements.
- Describe the difference between process groups (initiating, planning, executing, monitoring/controlling, closing) and project phases (discrete project modules).
- Discuss the ASTTBC Code of Ethics and its purpose as it relates to electronics projects.
- Discuss the concepts of legal and professional accountability and their relationship to basic contracts, patents, trademarks, and intellectual property associated with electronics and electrical engineering.

**Prior Learning Assessment and Recognition (PLAR)**

☒ Yes      ☐ No, PLAR cannot be awarded for this course because

**Typical Instructional Methods** (*Guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion.*)  
Lecture only.

**NOTE:** The following sections may vary by instructor. Please see course syllabus available from the instructor.

**Typical Text(s) and Resource Materials** (*If more space is required, download Supplemental Texts and Resource Materials form.*)

Author (surname, initials)	Title (article, book, journal, etc.)	Current ed.	Publisher	Year
1. No textbook required	Worksheets and lecture notes will be provided	<input type="checkbox"/>		
2.		<input type="checkbox"/>		
3.		<input type="checkbox"/>		
4.		<input type="checkbox"/>		
5.		<input type="checkbox"/>		

**Required Additional Supplies and Materials** (*Software, hardware, tools, specialized clothing, etc.*)**Typical Evaluation Methods and Weighting**

Final exam:	20%	Assignments:	20%	Field experience:		Portfolio:	%
Midterm exam:	%	Project:	30%	Practicum:	%	Other:	%
Quizzes/tests:	30%	Lab work:	%	Shop work:	%	Total:	100%

**Details (if necessary):**

**Typical Course Content and Topics**

- Basic definition and elements of a project.
- Scope, cost, time and quality
- Ethical considerations for electronics projects
- PMI and PMBOK
- Process groups and phases
- Project documents
- Agile project methodology
- Scrum project methodology
- Team members and stakeholders
- ASTTBC Code of Ethics
- Legal and professional accountability