

# COMPLEX PROJECT LEADERSHIP (CPL)

The following courses are offered by Telfer School of Management.

## **CPL 5101 Systems Thinking (1.5 unit)**

Resolution of complex problems requires holistic approaches, sophisticated thinking and pluralist methodologies. Foundational knowledge related to systems methodologies and their underpinning epistemologies that enable project managers to solve complex project problems in context.

**Course Component:** Lecture

## **CPL 5102 Self Realization and Personal Development (1.5 unit)**

Enables students to understand and develop their ambitions/goals, their personality, their values, and how they tend to relate to others. Different methodologies for developing and changing as individuals. Awareness of cultural differences between countries, societies and/or organizations. Self-management decision-making to achieve satisfactory work-life balance.

**Course Component:** Lecture

## **CPL 5103 Strategic Management of Complex Projects and Programs (1.5 unit)**

Implementation of long range strategies; contexts of high complexity and uncertainty; and emergent project outcomes in complex projects. Strategic and systems concepts and frameworks. Understanding strategic context and developing project strategies capable of delivering successful outcomes. Innovative and non-traditional development and delivery methodologies in meeting complex project challenges.

**Course Component:** Lecture

## **CPL 5104 Organizational Behaviour of Project Teams and of Project Team Systems (1.5 unit)**

Project teams are key to project, program and portfolio success. There are different kinds of project teams and they interact with stakeholders and other teams in complex multi-level systems. Intra- and inter-team interdependencies, processes, emergent states, and how these relate to team and systems of teams effectiveness.

**Course Component:** Lecture

## **CPL 5105 Planning and Communicating Change Effectively (1.5 unit)**

Change management and communication plans. Analyzing complex intra- and inter-organizational contexts. Understanding needs and characteristics of those targeted and impacted by change. Tailoring communication strategies.

**Course Component:** Lecture

## **CPL 5106 Acquisition Strategies (1.5 unit)**

How various procurement methodologies, financing strategies, and ownership mechanisms best deliver value for money, deal with the risks and opportunities across the complete lifecycle and how this links to the acquisition business case. The need to deal with industry development objectives, the importance of robust cost estimation, and risk sharing strategies within a suitable governance framework.

**Course Component:** Lecture

## **CPL 5107 Laws, Regulations, Intellectual Property and Contracts (1.5 unit)**

Complex projects in diverse legal environments and jurisdictions. Examination and interpretation of environments and frameworks to comply with legal obligations and minimize operational, legal and financial exposure. Definition of intellectual property requirements and arrangements vital to complex endeavours, especially in technologically advanced goods and services and across international boundaries.

**Course Component:** Lecture

## **CPL 5108 Strategically Managing Risk (1.5 unit)**

Viewing, balancing and acting upon the risks that threaten success while exploiting opportunities emerging from uncertainty. Causes and potential solutions to recurrent underestimates of schedule and cost risk and overstatement of project benefits. Application of systemic thinking and advanced risk analytics with focus on realizing value and considering the incentives, penalties and opportunities associated with risk transfer and insurance.

**Course Component:** Lecture

## **CPL 5109 Business Planning and Cases: Methods and Implementation (1.5 unit)**

Focus on planning for new projects or for substantial changes to existing projects using a business case approach. Topics include gap analysis, definition of expected outcomes and creation of cost-benefit models to support the proposed project. The use of management control systems as well as formative and summative evaluation models will be introduced.

**Course Component:** Lecture

## **CPL 5110 Advanced Negotiations and Problem Solving (1.5 unit)**

Essential negotiation and problem solving skills, multi-party decision-making and conflict resolution in all phases of complex project management.

**Course Component:** Lecture

## **CPL 5111 Managing for Innovation (1.5 unit)**

Innovation is key to economic development, and organizational and corporate performance. Successful implementation requires interaction between many different areas of expertise within organizations, and increasingly across organizational boundaries (e.g. in the context of open innovation). Examination of complex context and characteristics of innovations, familiarization of concepts and tools to facilitate innovation.

**Course Component:** Lecture

## **CPL 5112 Managing Contracts and Suppliers (1.5 unit)**

Complex project leaders need to consider the maturity of industry to provide solutions, how strategic programs can be leveraged for long term industry development and how contractual relationships can be made effective. Exploration of how to select and manage long term strategic partners and the supply chain in critical industry sectors, with attention on developing, maintaining and securing the contractual relationships within and between project partners, paying particular attention to embedding trust as a core social relation in contracts.

**Course Component:** Lecture

## **CPL 5113 Implementation of Complex Projects (1.5 unit)**

Exploration of differences between project, program and portfolio management. Implementation science and practice applied to complex projects, programs and portfolios.

**Course Component:** Lecture

**CPL 5114 Financial Analysis and Decision Making (1.5 unit)**

Financial planning and decision-making competencies in complex projects. Analysis of the financial position of contractors or alliance partners, cost estimation, life-cycle costing, investment appraisal, application of value for money criteria, project financing to raise and maintain the flow of project capital, budget and cash flow management over the project life and selection of protection mechanisms against foreign exchange rate or inflation fluctuations.

**Course Component:** Lecture

**CPL 5115 Problem Solving in Complex Environments (1.5 unit)**

Challenges in project or program leadership in chaotic and complex environments. Examination of complex projects from the point of view of creative problem solving processes, opportunity identification and implementation, entrepreneurial thinking at the individual, team, and larger system levels. Shift in leader mindset from challenges representing problems to problems representing opportunities.

**Course Component:** Lecture

**CPL 5116 Stakeholder Engagement and Crisis Management (1.5 unit)**

Strategic management of relationships with various stakeholders when risks become reality. Development of skills to identify potential issues and crisis areas within programs, to establish systems to understand stakeholder expectations, to manage the crisis process from issue identification through to implementing a crisis plan and debriefing, and demonstrate the importance of integrating communication and action plans as part of issues management.

**Course Component:** Lecture

**CPL 5117 Leadership for Results (1.5 unit)**

The project team's success depends on the style of leadership behaviour displayed by the project manager. Recognition and development of different styles of leadership behaviour, how each contribute to the success of the project team, depending on the circumstances in which they are displayed.

**Course Component:** Lecture

Prerequisite: CPL 5103.

**CPL 5310 Human Factors in Complex Project Leadership (1.5 unit)**

Students will describe and analyze an organization's teamwork, conflict, interactions, and influence among various team members and stakeholders. They will provide evidence-based analysis and recommendations to maximize collaboration and project success.

**Course Component:** Lecture

**CPL 5320 Management, Governance, Performance (1.5 unit)**

Students will examine an organization's management, governance and performance in complex projects/programs and help the organization improve.

**Course Component:** Lecture

**CPL 5330 International Study Tour (1.5 unit)**

Groups of students will examine organizations' capabilities in implementing complex projects/programs and help the organization improve.

**Course Component:** Lecture

**CPL 5340 Complex Project Consultancy (3 units)**

Using evidence-based practices, students will examine an organization in its entirety with regards to complex projects/programs and help that organization improve.

**Course Component:** Lecture

Prerequisite: Successful completion of 5100 level CPL courses.

**CPL 5350 Seminars in Complex Project Leadership (1.5 unit)**

Current issues facing applications in complex project management. Particular attention will be paid to practitioner and scholarly knowledge by providing cutting-edge best practice and research-based evidence delivered by a mix of practitioners and scientists.

**Course Component:** Lecture

**CPL 5360 Lectures in Project, Program and Portfolio Management (1.5 unit)**

Applying knowledge gained throughout the program, participants will deliver knowledge, expertise and experiences on complex project/program to community stakeholders.

**Course Component:** Lecture

**CPL 6100 Special Topics in Complex Project Leadership (1.5 unit)**

Selected aspects of complex project leadership not covered by other graduate courses.

**Course Component:** Lecture

**CPL 6300 Applications in Complex Project Leadership (1.5 unit)**

Applications dealing with current advances in complex project leadership, not covered by other graduate courses.

**Course Component:** Lecture