MS Construction Management 5 Year Assessment Plan

PROGRAM LEARNING OUTCOMES (PLOS)

| Sti Ca | I.L.O Alignment | |
|-----------|--|------|
| a | Understand and implement risk management, scheduling and estimating, building information modeling, high performance building assessment systems, and project delivery methods. | 1,6 |
| b | Use effective communication skills to solve practical construction problems, explain and defend the application of advanced construction practices associated with planning, staffing, scheduling and controlling construction projects. | 2, 4 |
| С | Plan and deliver a project meeting the desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, constructability, and sustainability. | 2, 5 |
| | Assessment Plan repeats every three year | |

| Year 1: 2024-2025 | |
|----------------------------------|---|
| 1.Which PLO(s) to assess | PLO a - Understand and implement risk management, scheduling and estimating, building information modeling, high performance building assessment systems, and project delivery methods. (ILO 1,6) |
| 2. Is it aligned to an ILO? | Yes, ILO 1,6 |
| 3.Sample (courses/# of students) | CMGT 670 Construction Enterprise and Risk Management |
| 4. SLO from the course | Analyze the different types of risk and assess their likelihood and impact; Evaluate the use of different quantitative analysis techniques such as Monte Carlo simulation to assess the overall effect of risk at a project and corporate |

| | level, thus facilitating decision making under uncertainty. |
|------------------------------------|---|
| 5.Assessment indicators | a-Midterm exam question; e- Final exam performance |
| 6.Assessment instrument | Program rubric |
| 7.Time (which semester(s)) | a-Spring 2025 |
| 8.Responsible person(s) | a-Prof. Gaedicke |
| 9. Ways of reporting (how, to who) | The results (quantitative and qualitative) will be reported by faculty to the department chair via completion of the course Faculty Self-Assessment form. |
| 10.Ways of closing the loop | Interaction between chair, faculty and industry advisory board |

| Year 2: 2025-2026 | | | |
|---------------------------------|--|--|--|
| 1.Which PLO(s) to assess | PLO b - use effective communication skills to solve practical construction problems, explain and defend the application of advanced construction practices associated with planning, staffing, scheduling and controlling construction projects. (ILO 2,4) | | |
| .Is it aligned with an ILO? | Yes, ILO 2,4 | | |
| .Sample (courses/# of students) | CMGT 685 Special Topics in Construction Management | | |
| SLO from the course | Identify current issues involving the construction industry. Conduct research, and present their findings orally and in writing. | | |
| Assessment activity | Data Analysis and Project | | |
| .Assessment instrument | Oral presentation rubric | | |
| Time (which semester(s)) | Summer/Fall 2025 | | |
| '.Responsible person(s) | c-Prof.Shahbodaghlou | | |
| Ways of reporting (how, to who) | The results (qualitative) will be reported by faculty to the department chair via completion of the course Faculty Self-Assessment form. | | |
| .Ways of closing the loop | Interaction between chair, faculty and industry advisory board | | |

| Year 3: 2026-2027 | |
|--------------------------------|---|
| .Which PLO(s) to assess | PLO c - plan and deliver a project meeting the desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, constructability, and sustainability. (ILO 2,5) |
| . Is it aligned to an ILO? | Yes, ILO 2,5 |
| Sample (courses/# of students) | CMGT 680, Construction Safety and Health |

.SLO from the course

SLO 1 - Develop strong technical knowledge and understanding of the basic principles of hazard sources related to environment, humans and equipment;

| 1.Which PLO(s) to assess | PLO b - use effective communication skills to solve practical construction problems, explain and defend the application of advanced construction practices associated with planning, staffing, scheduling and controlling construction projects. (ILO 2,4) |
|------------------------------------|--|
| .Is it aligned with an ILO? | Yes, ILO 2,4 |
| .Sample (courses/# of students) | CMGT 685 Special Topics in Construction Management |
| SLO from the course | Identify current issues involving the construction industry. Conduct research, and present their findings orally and in writing. |
| .Assessment activity | Data Analysis and Project |
| .Assessment instrument | Oral presentation rubric |
| .Time (which semester(s)) | Summer/Fall 2029 |