MIT Job Description

Program Analyst, Technical Leadership and Communication (TLC) Programs

Position Overview:

This position is for a full-time Program Analyst who will support the Technical Leadership and Communication (TLC) Programs, primarily the Gordon Engineering Leadership Program (GEL) and the Riccio Graduate Engineering Leadership Program (GradEL). The Program Analyst will process, analyze, interpret and report on program assessment and evaluation data and will contribute to enhancing program evaluation methods and systems.

GEL and GradEL, co-curricular Engineering Leadership programs at the undergraduate and graduate levels, respectively, have established a shared longitudinal assessment survey system that tracks students’ and recent alums’ progress over time. The Program Analyst will be a core facilitator of these recurring surveys and will be responsible for processing and interpreting assessment survey findings. The Program Analyst will prepare recurring reports on GEL and GradEL program performance and student assessment (at least annually for each program), and will prepare special reports on occasion as needed. Preparing presentations, data graphics, and other documentation of findings will also be a recurrent part of the role.

The Program Analyst will report to and collaborate with the TLC Associate Academic Director to develop survey strategies and approaches, to review findings, and to develop enhancements to program evaluation approaches. Further, the Analyst will, on occasion and as needed, consult with education experts (such as at MIT’s Teaching and Learning Lab) regarding survey approaches and methods. While the Program Analyst will be expected to work independently, collaboration and consultation will also be a key aspect of the role.

Principal Duties and Responsibilities (Essential Functions):

1. **Maintain the GEL and GradEL longitudinal assessment datasets.** Facilitate recurring (twice annually) electronic surveys using the GEL/GradEL assessment survey system (using Qualtrics software), checking and validating data collection, and working with other program personnel to ensure surveys reach intended respondents.

2. **Analyze and interpret findings from GEL and GradEL program assessments.** Employ tools such as spreadsheets and statistical programming tools (e.g., R, SPSS, or Stata, as appropriate) to analyze findings from the GEL and GradEL program assessment surveys. Analyses include, for example, pre-/post- program student assessment comparisons, cross-program comparisons, and data visualization of outcomes. Leverage existing analysis templates as appropriate and create new approaches or templates as needed.

3. **Communicate findings from GEL and GradEL program assessments.** Prepare recurring (approximately once annually) milestone reports on each program’s (GEL’s and GradEL’s) student outcomes and on alumni outcomes. Prepare occasional special reports or presentations as needed during the year. Occasionally present findings to program and stakeholder audiences.
4. **Assist the GradEL program with implementing data collection for its new Industrial Projects Program (IPP).** As called upon by the GradEL Senior Program Manager, collaborate to develop a feedback measurement system for the practice experiential component of GradEL, including both quantitative and qualitative performance feedback from both students and supervisors. Work with the Associate Academic Director to implement this new system (i.e., establish the means for data collection, storage, processing, and reporting).

5. **Collaborate with Associate Academic Director to improve and enhance data systems across GEL and GradEL.** Leverage experience with existing inherited data systems to envision improvements to systems and methods. Implement improvements as agreed upon with Associate Academic Director.

6. **Provide data analysis and reports to assist with educational activities.** Support TLC courses by occasionally (approximately once per semester) analyzing data from skill or trait assessments used within these courses (such as in: Engineering Leadership, Engineering Leadership Lab, Leading Creative Teams, and GradEL Workshops). These analyses will offer insight into effectiveness of instruction and for continuous improvement of course design and delivery, and will include aggregation of findings over time to ascertain student evaluation trends.

7. **Engage in professional development skills and compliance training as advised.** For instance, complete training pertinent to data handling and privacy, such as MIT Committee on the Use of Humans as Experimental Subjects (COUHES) training and attend MIT Teaching and Learning Lab (TLL) workshops pertinent to academic measurement.

8. **Perform additional duties adjacent to role as called upon.** For instance, but not limited to, assistance with GEL or GradEL program admissions and student interviews, assistance with expanding program assessment systems to include other TLC programs (e.g., the Undergraduate Practice Opportunities Program, UPOP).

**Supervision Received:**

Direct supervision by the Associate Academic Director, TLC

**Supervision Exercised:**

No supervision of MIT employees

**Qualifications & Skills:**

*Required:* bachelor’s degree in a social science, education, communications, or technical discipline that included exposure to processing and presenting data. 1 year work experience involving processing data and communicating about data. Demonstrated skills in spreadsheets, basic statistics, and information graphics. Familiarity with data visualization and communication tools required.

*Preferred:* Skills in one or more statistical programming language (e.g., R, SPSS, Stata, etc). University coursework in probability and statistics, statistical inference, data science, and related topics. Proficiency in statistical programming languages, database query languages, predictive analysis techniques, and statistical methodology strongly preferred. Candidate must be available to start between April 1 and July 1, 2023.