LANG 4032 Technical Communication 2 for Industrial Engineering and Decision Analytics (IEDA) / Integrated System Design (ISD) students

1. Course Information
LANG 4032 is a three-credit, one semester core course offered to Year 3/final year students from IEDA and to ISD students who are taking a Final Year Project (FYP). Students attend three hours of class and complete up to six hours of out-of-class work, per week. The course is offered in Spring semester. The course focuses on two areas:

Communication skills for IEDA / ISD projects
Students will develop effective organizational strategies and enhance their ability to use appropriate language to write the different sections of their FYP reports. They will also learn how to present information coherently and effectively in a poster presentation on their progress in the FYP.

Communication in Professional Contexts
Students will learn how audience and purpose influence the content, organization and language style of technical writing and speaking in a professional context. They will also develop their ability to write and speak about technological trends for different audiences and purposes.

2. Pre-requisites: LANG 2030 or LANG 2030(H). The course is open to IEDA students and ISD students undertaking a IEDA/ISD FYP. The most appropriate time to take this course is in Spring Semester Year 3.

3. Aims of the course: Intended Learning Outcomes

| 1. Knowledge and Content Related | a. You can identify and address the needs and concerns of a variety of academic and professional audiences in speaking and writing.  
|                                 | b. You can support claims with appropriate evidence, and properly acknowledge sources.  
|                                 | c. You can critically analyze and discuss major issues and recent developments in your major and related professions. |

| 2. Academic Skills and Competencies | a. You can make use of appropriate organizational structures, tones and formats in written and spoken communication for different audiences and purposes.  
|                                    | b. You can select, summarize and synthesize information from texts in your major subject.  
|                                    | c. You can use accurate and fluent language (vocabulary, |
structures and style) relevant to engineering-related communication tasks.

3. Ethical Standards
You can demonstrate academic integrity in course assignments.

4. Vision and Orientation to the Future
You can recognize the need to communicate courteously and appropriately in professional contexts.

4. Course assessment

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Weighting</th>
<th>ILOs</th>
</tr>
</thead>
</table>
| FYP progress report (individual assessment)                     | 25%       | 1. a, b, c  
|                                                                 |           | 2. a, b, c  
|                                                                 |           | 3.       |
| A poster presentation on progress in the FYP (individual assessment) | 25%       | 1. a, b, c  
|                                                                 |           | 2. a, b, c  
|                                                                 |           | 3.       |
| A white paper (individual assessment)                           | 25%       | 1. a, b, c  
|                                                                 |           | 2. a, b, c  
|                                                                 |           | 3, 4     |
| A presentation on industry/design trends (individual assessment) | 20%       | 1. a, b, c  
|                                                                 |           | 2. a, b, c  
|                                                                 |           | 3, 4     |
| Completion of out-of-class assignments                          | 5%        |        |

5. Course Content

Part 1 Communication for IEDA/ISD projects

- Talking about your Final Year Project
- Writing an FYP Introduction
- Writing a literature survey
- Describing processes and procedures
- Describing implementation
- Accounting for progress
- Practicing presentation skills
- Presenting project outcomes
- Designing a IEDA/ISD poster
Part 2 Communication in the workplace

- Talking about and evaluating trends
- Reaching out to potential customers
- Strategies for white papers
- White papers and problem solving
- Communicating appropriately in the workplace