Session 6 Recap CELEN087

## Learning outcomes:

- Know how to create a simple document with the following summarized contents.
- Typeset math related contents properly by using inline or display math modes.
- Familiarize yourself with different commands for typesetting math expressions.

# **Content Summary**

1. Basic structure for creating an article type document

```
\documentclass{article}
% preamble for general document settings
\begin{document}
% document content goes here...
\end{document}
```

#### 2. List environment

```
\begin{itemize} % unordered list
\item ...
\item ...
\end{itemize}

\begin{enumerate} % ordered list
\item ...
\item ...
\end{enumerate}
```

# 3. Basic fonts style

```
\textbf{ text... } % boldface text
\textit{ text... } % italics text
\underline{ text... } % underlined text
```

# 4. Inline math mode

```
$ Math Expressions $
% Syntax for different commands can be found in the LaTeX command sheet on Moodle
\( Math Expressions \) % an equivalent way
```

### 5. Display math mode

```
$$ Math Expressions $$
\[ Math Expressions \] % an equivalent way
```

#### 6. **Section and subsection**

```
\section{ name... }
\subsection{ name... }
```

## 7. Document setting

```
\documentclass{article}
% this is the preamble of the document.

\title{...}
\author{...}
\date{...} % use command \today for displaying today's date

\begin{document}
% this is the content of the document.

\maketitle
% display the information defined in the preamble

\tableofcontents
% display a table of contents with names of sections and subsections
% actual content goes here...
\end{document}
```

**Open questions** (Al tools are allowed/recommended in your learning process):

- 1. What are the advantages of using LATEX over other typesetting software (e.g. Microsoft Word) for Science and Engineering students?
- 2. What is a good way of studying LATEX as a beginner?