**Certificate of Engineering Concentration**

**Regulations and Application Form**

**Eligibility**

Students who successfully completed one of the engineering

concentrations, i.e. Systems Engineering, Human Factors Engineering,

and Data Science.

**Application Period**

Applications are accepted within the first eight weeks of each semester, starting from the first day of classes. The review will be conducted by the committee before the end of the semester. Each semester, applications will be reviewed only once.

**Regulations**

To be eligible for the certificate, the applicant must meet the following

requirements:

1) **Systems Engineering**

1. Completion of at least four courses in the areas of Production

Management and Operations Research.

2. Fulfillment of the following two conditions:

I. Successful completion of the course "Production Management System".

II. Successful completion of at least one of the following four courses:

- Linear Programming

- Applied Probability Models

- Mathematical Programming

- Stochastic Processes

2) **Human Factor Engineering**

1. Completion of at least three courses in the area of Human Factors Engineering.

2. Successful completion of at least one of the two courses   
- Psychological Foundations in Human Factors Engineering

- Physiological Foundations in Human Factors

3) **Data Science**  
1. Completion of at least four courses in the area of Information Technology,

2. Successful completion of at least one of the three courses

- Data Science

- Data Mining Applications

- Big Data Analytics and Applications

**Course Information**  
For the list of courses in each concentration, please refer to the following link:

<https://www.im.ntust.edu.tw/var/file/14/1014/img/210381829.pdf>

**Application Form**

Please submit the completed application form together with official transcripts to the DIM office

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| --- | --- |
| **Name of Applicant** | **Student ID Number** |
| **Email address** | **Cell phone number** |

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| **Systems Engineering [4 courses]** | | | **Human Factor Engineering**  **[3 courses]** | | **Data Science [4 courses]** | |
| **□ IM5101**  Linear Programming  **□ IM6101**  Mathematical Programming  **□ IM7103**  Applied Probability Models **□ IM7102**  Stochastic Processes | | **One out of four** | **□ IM7301**  Psychological Foundations  in Human Factor Engineering  **□ IM7303**  Physiological Foundations in Human Factor Engineering | **One out of two** | **🞏 IM5213**  Data Science  **□ IM5803**  Data Mining Applications  **□ IM5211**  Big Data Analytics and  Applications | **One out of three** |
| **□ IM 6307**  Production Management System (obligatory) | |  |  |  |  |  |
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| **Result** | **🞏 Passed**  **🞏 Failed because : […]** | | | | | |

Signature Committee Chair: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Signature Department Chair: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_