INDU 421: Facilities Design and Material Handling Systems.

- Lab Outline:

| Introduction to AUTOCAD | Lab-01 : Introduction | |
|---|----------------------------|--|
| Introduction to FACTORYCAD | | |
| Introduction to Factory Design Using FACTORYCAD | – Lab-02 : Introduction | |
| Introduction to Factory Design Optimization Using FACTORYFLOW | | |
| Introduction to Facility Design Projects | Lab-03 : Project | |
| Individual Project Definition | | |
| Additional FACTORY Tools | Lab-04 : Project | |
| Project Selection | | |
| Individual Project - Workshop Session | - Lab-05 : Project - LINGO | |
| Introduction to Facility Design Using LINGO | | |
| Additional LINGO Models | Lab-06 : LINGO - Project | |
| Individual Project - Workshop Session | | |
| Individual Project - Workshop Session | Lab-07 : Project | |
| Individual Project - Submission | | |

- Project Definition:

| S1 - Select Target Facility | Examples : - Custom Manufacturing - Distribution & Transportation - Mass Producer | | |
|------------------------------------|---|-----|---|
| S2 - Define - Optimize - Design | Define: - Departments - Machines - Personnel - Space Requirements | 25% | Submission Required - Format : E- Document |
| Optimize Using FACTORYFLOW | | 25% | Activity Relationship Diagram Required |
| | Design using FACTORYCAD | 50% | Final Design Evaluation Criteria |

- Evaluation Scheme:

| Lab-Attendance | 50% | Final Design Evaluation Critoria | |
|-----------------|-----|----------------------------------|--|
| Project-Related | 50% | Final Design Evaluation Criteria | |
| | | Design Departments | |
| | | Activity Relationship | |
| | | Factory Design Complexity | |
| | | Factory Esthetic | |