

SHYFTE 4.0 - Training of the Students Sessions

| Pilot in Domain 1: Industrial Engineering & business Management | Level (B, I, E) | Module Delivery | Module Assessment | Date ToS | Nb Students |
|---|-----------------|--|----------------------|------------------|-------------|
| Human Resource Management for Industry 4.0 | B | Lecture / Case Study | Pre-test / Post-test | 14 January 2022 | 41 |
| Role of Data for Future Organization | I | Lecture and Demonstration Class discussion | Pre-test / Post-test | 18 February 2022 | 45 |
| Digital Communication | B,I | Lecture / Case Study Workshop | Pre-test / Post-test | 25 February 2022 | 41 |
| Business Intelligence | E | Lecture and Demonstration Class discussion | Pre-test / Post-test | 28 January 2022 | 43 |
| New Product Development | E | Lecture / Case Study / Workshop | Pre-test / Post-test | 11 February 2022 | 46 |

| Pilot in Domain 1: Industrial Engineering & business Management | Level (B, I, E) | Module Delivery (Learning method) | Module Assessment | Date ToS | Nb Students |
|---|-----------------|--|--|----------------------------------|-------------|
| Introduction to Industry 4.0 | B | Case study, Project assignment, Team working group | Assignment, Project presentation | 28, 30 June 2022 and 5 July 2022 | 45 |
| Cloud ERP | B | Case study, simulation game, projec assignment | Assignment, Project presentation, Assessment rubric for teamwork | 4, 11 July 2022 | 40 |
| Integrated Simulation and Optimization | E | case study, project assignment | Assignment, Project presentation, Assessment rubric for teamwork | 7, 14 July 2022 | 17 |
| Data Collecting System | B | case study, project assignment | Assignment, Project presentation, Assessment rubric for teamwork | 30 Jun, 1 July 2022 | 15 |
| Automatic Data Collecting System | I | practical assignment, project assignment | Assignment, Project presentation, Assessment rubric for teamwork | 4 - 5 July 2022 | 15 |
| Decision Making with Big Data | I | case study, group assignment, project assignment | Assignment, Project presentation | 25 - 26 July 2022 | 30 |

| Pilot in Domain 2: Software Engineering and big data analysis (CDU/CUIT) | Level (B, I, E) | Module Delivery | Module Assessment | Date ToS | Nb Students |
|--|-----------------|---|--|-------------------------|-------------|
| Principle and Application of BigData Technology | B | Lecture, Case study, Group discussion, Group work, Project assignment | Assignment, Project presentation, Assessment rubric for teamwork | 8-9 April 2022 | 74 |
| Comprehensive Training of Artificial Intelligence | I | Lecture, Case study, Group discussion, Group work, Project assignment | Assignment, Project presentation, Assessment rubric for teamwork | 24 March- 15 April 2022 | 74 |
| Critical Thinking Oriented BigData | I | Lecture, Case study, Group discussion, Group work, Project assignment | Assignment, Project presentation, Assessment rubric for teamwork | 14-15 May 2022 | 10 |
| Smart Decision Making with BigData | E | Lecture, Case study, Group discussion, Group work, Project assignment | Assignment, Project presentation, Assessment rubric for teamwork | 18 April - 20 June 2022 | 40 |
| Data Mining Ideology and Technology | E | Lecture, Case study, Group discussion, Group work, Project assignment | Assignment, Project presentation, Assessment rubric for teamwork | 21-22 May 2022 | 10 |

| Pilot in Domain 3: Wireless Network and Analytics (UPM) | Level (B, I, E) | Module Delivery (Learning method) | Module Assessment | Date ToS | Nb Students |
|---|-----------------|--|--|--------------|-------------|
| Introduction to Cybersecurity | B | Lecture, Case study, Group discussion, Group work, Project assignment | Project report, Project presentation, Assessment rubric for teamwork | 13 June 2022 | 23 |
| Data Acquisition and Analysis | I | Lecture, Group discussion, IoT hands-on project, Group work, Case study | Project report, Project presentation, Assessment rubric for teamwork | 16 June 2022 | 43 |
| Data Governance and Management | E | Lecture, Role play, Problem-based learning, Group work | Project report, Project presentation, Assessment rubric for teamwork | 13 June 2022 | 15 |
| Introduction to Energy Management | B | Lecture, Group discussion, Case study, Project assignment | Project report, Project presentation, Assessment rubric for teamwork | 15 June 2022 | 43 |
| Renewable Energy for Wireless Networks | I | Lecture, Group discussion, Case study, Group work, Project assignment, Academic Visit | Project report, Project presentation, Project video | 14 June 2022 | 43 |
| Green Energy Wireless Network | E | Lecture, Group discussion, Problem-based learning, Group work and gamification, Blended learning | Project report, Project presentation, Assessment rubric for teamwork | 17 June 2022 | 7 |

| Pilot in Domain 4: Artificial Intelligence (UTM) | Level (B, I, E) | Module Delivery | Module Assessment | Date ToS | Nb Students |
|--|-----------------|--|---|---------------|-------------|
| Supervised and Unsupervised Learning | B | Lecture presentation, Case study, Project Group Work. | Project Presentation, Quiz | 27 June 2022 | 59 |
| AI for Computer Vision | I | Lecture presentation, Case study, Project Group Work and hands-on activities | Project Group Assignment, Quizzes | 5 July 2022 | 51 |
| AI for Computer Vision (hands-on session) | I | Lecture presentation, Case study, Project Group Work and hands-on activities | Project Group Assignment, Quizzes | 6 July 2022 | 51 |
| AI for Industry | E | Lecture presentation, Case study, Group Work | Project Group Assignment, Quizzes | 28 June 2022 | 49 |
| Fundamental of AI | B | Lecture presentation, Case study, Group Work. | Project Group Assignment, Quizzes | 26 June 2022 | 60 |
| Metaheuristic Optimization | E | Lecture presentation, Case study, Simulation, Group Presentation. | Assignment, Project Presentation and Teamworking Skills | 2 August 2022 | 46 |