NEW SKILLS FOR NEW JOBS (TREESP1.3.FoW/P-03/259)

ACTIVITY 3. CURRICULUM DEVELOPMENT

COMPUTER INTEGRATED MANUFACTURING AND SMART FACTORY COURSE	
Aim of the Course	Increase the employability of the unemployed people by the way of COMPUTER INTEGRATED MANUFACTURING AND SMART FACTORY

Subject Name	**Hours**	**Method**
AutoCAD Software Training	25	Theoretical and Practical
SolidWorks Software Training	25	Theoretical and Practical
Computer Aided Design (CAD)	6	Theoretical and Practical
Computer Aided Manufacturing (CAM)	6	Theoretical and Practical
G Coding	6	Theoretical and Practical
CNC Milling Operations	6	Theoretical and Practical
CNC Turning Operations	6	Theoretical and Practical
Robots, conveyor and automatic storage and retrieval systems (ASRS)	6	Theoretical and Practical
Assembly and Quality Control	6	Theoretical and Practical
Computer Integrated Manufacturing (CIM)-Intelligent Factory Design	9	Practical
Computer Integrated Manufacturing (CIM)-Intelligent Factory Management	9	Practical
Computer Integrated Manufacturing (CIM)-Intelligent Factory Project (Everyone who attends the course will be given a project that they will complete within 5 days. It is planned to consolidate and implement the course content and software learned).	10	Practical
Learning Outcomes	* Learning CAD and CAM operations, * Product and manufacturing design with G-coding in a company, * To be informed about CNC machines and CNC operations in a factory, * To be able to design an intelligent manufacturing system with all its components in a company, * To learn the areas of use of robots in a production system and to learn how to use robots in production.	

INDUSTRIAL ROBOT PROGRAMMING COURSE	
Aim of the Course	Increase the employability of the unemployed people by the way of INDUSTRIAL ROBOT PROGRAMMING TRAINING

Subject Name	**Hours**	**Method**
Industrial Robot Systems	4	Theoretical
Articulated Robots	8	Theoretical and Practical
Starting up the Articulated Robots	10	Theoretical and Practical
Articulated Robot Programming	30	Theoretical and Practical
Articulated Robot Application Examples	10	Practical
Scara Robots	8	Theoretical and Practical
Starting up the Scara Robots	10	Theoretical and Practical
Scara Robot Programming	30	Theoretical and Practical
Scara Robot Application Examples	10	Practical

LEARNING OUTCOMES	- Explains the working principle of industrial robot system - Moves articulated and scara industrial robots in coordinate systems - Starts up articulated and scara industrial robots - Executes the industrial robot programs - Programs articulated and scara robots for industrial applications

ENTERPRISE RESOURCE PLANNING COURSE	
Aim of the Course	Increase the employability of the unemployed people by the way of ENTERPRISE RESOURCE PLANNING

Subject Name	**Hours**	**Method**
BUSINESS ADMINISTRATION	6	Theoretical
INFORMATION SYSTEMS	3	Theoretical
MANAGEMENT	6	Theoretical
ERP-MANAGEMENT MODULES	18	Practical
PRODUCTION	9	Theoretical
ERP-PRODUCTION MODULES	18	Practical
MARKETING	8	Theoretical
ERP-MARKETING MODULES	18	Practical
FINANCE	6	Theoretical
ERP-FINANCE MODULES	18	Practical
MAINTENANCE	6	Theoretical
ERP-MAINTENANCE MODULES	12	Practical

LEARNING OUTCOMES	- To be able to use the recording, transaction and reporting features of Enterprise Resource Planning systems in a company. - To be able to carry out operations related to inventory management in a company. - To be able to operate the material requirement planning (MRP) system in a company. - To be able to conduct purchasing and sales transactions in a company through the ERP system. - Creating freight bill and invoice with ERP system. - To be able to perform financial transactions with the ERP system. - To be able to generate reports for enterprise management with the ERP system.

ARTIFICIAL INTELLIGENCE AND DATA MINING COURSE	
Aim of the Course	The aim of this course is to introduce students to ARTIFICIAL INTELLIGENCE AND DATA MINING techniques. To give information about the applications of real life problems using Artificial Intelligence and Data Mining software.

Subject Name	**Hours**	**Method**
The Concepts of Artificial Intelligence	4	Theoretical
Application areas of Artificial Intelligence	4	Theoretical
The Concepts of Data Mining	10	Theoretical
Application areas of Data Mining	10	Theoretical
Artificial Intelligence Methods	6	Theoretical
Data Mining Models	6	Theoretical
Classification algorithms (Classification and statistics-based algorithms)	12	Practical
Artificial Neural Network Models	12	Theoretical and Practical
Association rules and relational analysis (APRIPORI and GRI algorithms)	12	Practical
Clustering analysis (One-dimensional and multi-dimensional K-Means algorithms)	12	Practical
Sample application and analyses	12	Practical
PROJECT (Everyone participating in the course will be given a project that they will complete in 5 days. Artificial Intelligence or Data Mining models will be used in the project. It is planned to consolidate and implement the subjects and software learned.)	20	Practical

LEARNING OUTCOMES	- To be able to perform demand forecasting studies in a company with Artificial Neural Network or Data Mining techniques - Reducing the rate of faulty products in a company with Artificial Intelligence and Data Mining techniques - To be able to make financial analysis in a company with Artificial Intelligence and Data Mining techniques