|  |
| --- |
| Course Details |
| Code | **Academic Year** | **Semester** |
| BE020 | 2021-2022 | Elective |
| Title | **T** | **A** | **L** | **ECTS** |
| Digital Transformation | 3 | 1 | 0 | 10 |
|  |
| Language | English |
| Level | **Master** |  | **Doctorate** | **X** |
| Department / Program | PhD in Business and Economics |
| Forms of Teaching and Learning | Face to face |
| Course Type | **Compulsory** |  | **Elective** | **X** |
| Objectives | The purpose of this course is to enable students to gain knowledge in the field of digital transformation in businesses and thus to develop a theoretical background in their academic studies and to develop a perspective so that they can evaluate the applications in business life. |
| Content | In this course, the effects of today's digital world on businesses will be discussed; the concept of Industry 4.0, the conditions that create digital transformation in businesses and the challenges ahead, new generation technologies, digital leadership and digital culture will be covered. |
| Prerequisites | - |
| Coordinator | Prof. Dr. Müge KLEIN |
| Lecturer(s) | TBD |
| Assistant(s) | TBD |
| Work Placement | - |
| Recommended or Required Reading |
| Books / Lecture Notes | - |
| Other Sources | - Abbas Strømmen-Bakhtiar. 2020. *Introduction to Digital Transformation: and its impact on society.* Informing Science Press.- Anup Maheshwari. 2019. *Digital Transformation: Building Intelligent Enterprises.* Wiley.- Klaus Schwab. 2017. *The fourth Industrial Revolution*. Portfolio Penguin. - Related Academic Papers |
| Additional Course Material |
| Documents | - |
| Assignments | - |
| Exams | - |
| Course Composition |
| Social Sciences |  | %70 |
| Educational Sciences |  | % |
| Natural Sciences |  | % |
| Health Sciences |  | % |
| Expert Knowledge |  | %30 |
| Assessment |
| Activity | **Count** | **Percentage (%)** |
| Midterm Exam | 1 | 30 |
| Quiz |  |  |
| Assignments | 2 | 20 |
| Attendance | 1 | 10 |
| Recitations |  |  |
| Projects |  |  |
| Final Exam | 1 | 40 |
| Total | **100** |
| ECTS Points and Work Load |
| Activity | **Count** | **Duration** | **Work Load (Hours)** |
| Lectures | 14 | 4 | 56 |
| Self-Study |  |  |  |
| Assignments | 1 | 56 | 56 |
| Presentation / Seminar Preparation | 1 | 56 | 56 |
| Midterm Exam | 1 | 56 | 56 |
| Recitations |  |  |  |
| Laboratory |  |  |  |
| Projects |  |  |  |
| Final Exam | 1 | 56 | 56 |
| Total Work Load | **280** |
| ECTS Points (Total Work Load / 28)  | **10** |
| Course Learning Outcomes |
| 1 | To be able to understand the concept of digital transformation created by the Industry 4.0 effect and its effect on businesses. |
| 2 | To have knowledge about digital transformation and related concepts in businesses and to be able to interpret them. |
| 3 | To be able to use the necessary strategies to manage the digital transformation process in businesses. |
| 4 | Developing the ability to conduct a literature review in order to create a theoretical background for academic studies and a doctoral thesis in the relevant field. |
| 5 | To be able to have a transformational managerial perspective, to match and interpret the applications in business life with theoretical knowledge. |
| Weekly Content |
| 1 | Industry 4.0 and Digital Transformation in Business |
| 2 | Internet of Things and Cloud Technology |
| 3 | Big Data |
| 4 | Artificial Intelligence and Machine Learning |
| 5 | Augmented and Virtual Reality, 3D Printer |
| 6 | Digital Culture and Digital Leadership |
| 7 | Digital Organization, Digital Work and Digital Worker |
| 8 | Digital Transformation and Innovation, Types and Management |
| 9 | Midterm Exam |
| 10 | Digital Transformation and Innovation Management |
| 11 | Digital Transformation Strategies for Businesses |
| 12 | Measurement of Digital Maturity |
| 13 | Digital Transformation Roadmap |
| 14 | Guest Presentation |
| 15 | General Review and Evaluation |
| Contribution of Learning Outcomes to Program Objectives (1-5) |
| CLO | **P1** | **P2** | **P3** |
| 1 | 4 | 5 | 1 |
| 2 | 4 | 5 | 1 |
| 3 | 4 | 4 | 1 |
| 4 | 4 | 5 | 1 |
| 5 | 4 | 5 | 1 |
| Contribution Level | 1: Low 2: Low-intermediate 3: Intermediate 4: High 5: Very High |
|  |
| Compiled by: | Prof. Dr. Müge KLEIN (Head of Sub-Department Management and Organization) |
| Date of Compilation: | 10.05.2021 |