

**COURSE SYLLABUS**

| Course Title            | Course Code                    | Semester            | Course Hour/Week            |                     | Credit                                   | ECTS  |
|-------------------------|--------------------------------|---------------------|-----------------------------|---------------------|--|-------|
|                         |                                |                     | Theory                      | Practice            |  |       |
| Artificial Intelligence | VCDE226                        | 4                   | 3                           | 0                   | 3  | 5     |
| Course Type             | Compulsory Course              | Department Elective | Faculty Elective            | University Elective | CoHE (YÖK) Elective                      | Other |
|                         | -                              | -                   | -                           | Yes                 | -  | -     |
| Level of Course         | Associate Degree (Short Cycle) |                     | Undergraduate (First Cycle) |                     | Graduate/ Doctoral (Second /Third Cycle) |       |
|                         | -                              |                     | Yes                         |                     | -  |       |

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| <b>Language of Instruction</b> | English |
|--------------------------------|---------|

|                                 |  |   |   |
|---------------------------------|--|---|---|
| <b>Course Instructor(s)</b>     | Dr. Masoud Moradi  | E-mail : <a href="mailto:masoud.moradi@arucad.ed.tr">masoud.moradi@arucad.ed.tr</a>                                     | Office :  |
| <b>Course Objectives</b>        | <p>This course introduces the fundamental concepts of Artificial Intelligence (AI), including machine learning, natural language processing, and computer vision, while exploring ethical considerations in AI. Emphasis is placed on how AI can be integrated across various industries—such as communication, media, design, and beyond—to create innovative solutions and user-centric experiences. Students will gain a broad perspective on AI’s impact and practical uses, no prior background required.</p> |   |   |
| <b>Course Learning Outcomes</b> | <b>Students will able to:</b>  | <b>Teaching Methods</b>   | <b>Evaluation Methods</b>   |
|                                 | <ul style="list-style-type: none"> <li>- Define AI and recognize its major subfields (ML, NLP, CV).</li> <li>- Describe the history and evolution of AI in various industries.</li> </ul>  | <ul style="list-style-type: none"> <li>- Lectures</li> <li>- Class discussions</li> <li>- Instructor’s notes</li> </ul> | <ul style="list-style-type: none"> <li>- Midterm Exam</li> <li>- Final Exam</li> <li>- Class Participation</li> </ul> |
|                                 | <ul style="list-style-type: none"> <li>- Identify AI techniques used in communication, media, finance, design, and</li> </ul>  | <ul style="list-style-type: none"> <li>- Lectures</li> <li>- Case studies</li> </ul>                                    | <ul style="list-style-type: none"> <li>- Midterm Exam</li> <li>- Presentation</li> </ul>                              |

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|                       | <p>more.</p> <ul style="list-style-type: none"> <li>- Relate AI methods to improved user experiences and organizational processes.</li> </ul>  | - Reading assignments   |  |
|                       | <ul style="list-style-type: none"> <li>- Analyze impact on efficiency, scalability, creativity, and user satisfaction.</li> <li>- Critically assess limitations and performance in real-world scenarios.</li> </ul>  | <ul style="list-style-type: none"> <li>- Lectures</li> <li>- Group discussions</li> <li>- Project-based learning</li> </ul> | <ul style="list-style-type: none"> <li>- Midterm Exam</li> <li>- Final Exam</li> </ul>   |
|                       | <ul style="list-style-type: none"> <li>- Identify ethical issues (privacy, bias, social or economic impact).</li> <li>- Debate AI's influence on modern society and future developments across multiple sectors.</li> </ul>  | - Lectures  | <ul style="list-style-type: none"> <li>- Midterm Exam</li> <li>- Presentation</li> </ul> |
| <b>Course Content</b> | <ul style="list-style-type: none"> <li>└ Introduction to AI, historical overview, and core definitions (weak vs. strong AI).</li> <li>└ Major AI subfields: <b>Machine Learning, Natural Language Processing, Computer Vision.</b></li> <li>└ Applying AI in various industries (communication, design, marketing, finance, healthcare).</li> <li>└ Ethical and societal implications (privacy, data bias, job displacement).</li> <li>└ Future trends in AI-driven applications and emerging technologies.</li> </ul> |   |  |

**COURSE OUTLINE/SCHEDULE**

| Week | Topic   | Implementation (theory/practice) | Required Reading, Preliminary preparation   |
|------|---|----------------------------------|---|
| 1    | Course Introduction   | T                                | Instructor Lecture Notes  |
| 2    | Introduction to AI<br>- General concepts of AI<br>- Historical overview | T                                | Artificial intelligence / Michael Wooldridge ; with illustrations by Stephen Player.by Wooldridge, Michael J, |

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|    |   |                | Availability: <b>Items available for loan:</b> ARUCAD (1)Call number: Q335.4 .W66 2018   |
| 3  | <b>Types of AI</b><br>- Narrow vs. General AI<br>- Key subfields (ML, NLP, CV)                                | T              | Artificial intelligence / Michael Wooldridge ; with illustrations by Stephen Player.by Wooldridge, Michael J, Availability: <b>Items available for loan:</b> ARUCAD (1)Call number: Q335.4 .W66 2018 |
| 4  | <b>Understanding Intelligence</b><br>- Human vs. Machine Intelligence<br>- Core attributes of “intelligence”. | T              | Artificial intelligence / Michael Wooldridge ; with illustrations by Stephen Player.by Wooldridge, Michael J, Availability: <b>Items available for loan:</b> ARUCAD (1)Call number: Q335.4 .W66 2018 |
| 5  | <b>Data and Algorithms in AI</b><br>- Role of data, training sets, and algorithm.                             | T              | Artificial intelligence / Michael Wooldridge ; with illustrations by Stephen Player.by Wooldridge, Michael J, Availability: <b>Items available for loan:</b> ARUCAD (1)Call number: Q335.4 .W66 2018 |
| 6  | AI-Chatbots   | T              | Instructor Lecture Notes   |
| 7  | Midterm   | <b>Midterm</b> |  |
| 8  | <b>MIDTERM WEEK</b>   | <b>Midterm</b> |  |
| 9  | <b>Machine Learning Basics</b><br>- Supervised vs. Unsupervised Learning<br>- Real-world use cases            | T              | Instructor Lecture Notes   |
| 10 | <b>Natural Language Processing (NLP)</b><br>- Text classification, sentiment analysis<br>- Chatbots           | T              | Instructor Lecture Notes   |

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| 11 | <b>Computer Vision</b><br>- Image recognition, object detection<br>- Sample applications in communication and media. | T | Artificial intelligence / Michael Wooldridge ; with illustrations by Stephen Player.by Wooldridge, Michael J, Availability: <b>Items available for loan: ARUCAD (1)</b> Call number: Q335.4 .W66 2018 |
| 12 | <b>AI in Industry</b><br>- Communication, media, marketing, healthcare<br>- Case studies and best practices          | T | Instructor Lecture Notes  |
| 13 | <b>AI in Industry (continued)</b><br>- Automation, finance, creative design  | T | Instructor Lecture Notes  |
| 14 | <b>Evaluating AI Effectiveness</b><br>- Metrics for performance, user satisfaction, cost-benefit analysis.           | T | Instructor Lecture Notes  |
| 15 | Course Review  | T | Instructor Lecture Notes  |
| 16 | <b>FINAL EXAM WEEK</b>   | T | Instructor Lecture Notes  |

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| <b>Required Course Material(s) / Reading(s)/ Text Book(s)</b> | Artificial intelligence / Michael Wooldridge ; with illustrations by Stephen Player.by Wooldridge, Michael J, Availability: <b>Items available for loan: ARUCAD (1)</b> Call number: Q335.4 .W66 2018. |
| <b>Recommended Course Material(s)/ Reading(s) /Other</b>      | Relevant online tutorials and articles as advised by the instructor.   |

| ASSESSMENT          |        |             |
|---------------------|--------|-------------|
| Learning Activities | NUMBER | WEIGHT in % |
| Mid-Term            | 1      | 30          |


















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|---|---|-----|
| Quiz  |   |     |
| Assignment  |   |     |
| Project   |   |     |
| Field Study   |   |     |
| Presentation / Seminar  | 1 | 20  |
| Studio Practice   |   |     |
| Other   |   |     |
| <b>Contribution of Final Examination/Final Project/ Dissertation to the Final Grade</b> | 1 | 50  |
| <b>TOTAL</b>  |   | 100 |

| CONTRIBUTION OF COURSE LEARNING OUTCOMES TO PROGRAMME LEARNING OUTCOMES |  |   |   |   |   |   |
|---|--|---|---|---|---|---|
|   | PROGRAMME LEARNING OUTCOMES  | Level of Contribution (1- lowest/ 5- highest) |   |   |   |   |
|   |  | 1   | 2 | 3 | 4 | 5 |
| 1   | Knows the historical development of the field of communication, basic concepts, theories and research methods.   |   | X |   |   |   |
| 2   | Knows the principles and elements of basic design.   |   | X |   |   |   |
| 3   | Knows the history, theories and theorists of visual communication.   | X   |   |   |   |   |
| 4   | Knows advanced practical skills in various commercial and creative contexts, including graphic and audiovisual multimedia design.  |   |   |   | X |   |
| 5   | Knows national and international ethical rules, standards and legal documents on communication and visual communication design.  |   |   |   | X |   |
| 6   | Able to use the tools, methods and techniques and computer software required for visual communication design applications.   |   |   | X |   |   |
| 7   | Able to produce innovative and original works that reflect abstract and concrete concepts by emphasizing creativity  |   |   | X |   |   |
| 8   | Has the knowledge and skills to transform creative and innovative ideas into graphic, photographic, typographic, illustrative, 2 and 3-dimensional, animated and interactive visual expressions. |   |   | X |   |   |
| 9   | Applies visual communication design techniques with design technologies in developing and changing media environments.   |   | X |   |   |   |
| 10  | Has the competence to create visuals with designs that emphasize aesthetics in design processes.   |   |   | X |   |   |

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| 11 | Has the competence to define the problem, solve the problem, plan, manage the project and present in the design-based project development process.  |   |   |   | X |
| 12 | Has the ability to use research methods and techniques in the field of Visual Communication.  |   |   |   | X |
| 13 | Has the competence to research, plan, implement and report during the project phase.  |   |   | X |   |
| 14 | Has the competence to establish the connection between design and aesthetic values.   | X |   |   |   |
| 15 | Has the competence to interpret universal visual culture and associate the ties of symbols with universal visual culture.   |   | X |   |   |
| 16 | Has the competence to analyze, understand and interpret projects in the field of visual communication design with a critical and independent approach.  |   |   | X |   |
| 17 | Knows how to integrate and use digital technologies and artificial intelligence based/supported design tools creatively and innovatively in visual communication design and production stages.  |   |   |   | X |
| 18 | Knows how to integrate and use digital technologies and artificial intelligence-based/ supported design tools creatively and innovatively in visual communication design and production stages. |   |   |   | X |
| 19 | Evaluates artificial intelligence applications in design studies with a critical approach in terms of aesthetics and originality, and uses them in accordance with ethical rules.               |   |   |   | X |

| ECTS / STUDENT WORKLOAD                             |        |      |      |                  |
|---|--------|------|------|------------------|
| ACTIVITIES  | NUMBER | UNIT | HOUR | TOTAL (WORKLOAD) |
| Course Teaching Hour (X weeks * total course hours) | 14     |      | 3    | 42               |
| Preliminary Preparation and self- study             |        |      |      |                  |
| Mid-Term  | 1      |      | 30   | 30               |
| Quiz  |        |      |      |                  |
| Assignment  |        |      |      |                  |
| Project   |        |      |      |                  |
| Field Study   |        |      |      |                  |
| Presentation / Seminar                              | 1      |      | 20   | 20               |
| Studio Practice                                     |        |      |      |                  |
| Final Examination/ Final Project/ Dissertation      | 1      |      | 40   | 40               |
| Other   |        |      |      |                  |
| <b>TOTAL WORKLOAD</b>                               |        |      |      | <b>132</b>       |

|                            |  |  |  |      |
|----------------------------|--|--|--|------|
| <b>TOTAL WORKLOAD / 25</b> |  |  |  | 5.28 |
| <b>ECTS</b>                |  |  |  | 5    |

|   |  |   |
|---|--|---|
|    | SDG 1: No Poverty                              | × |
|    | SDG 2: Zero Hunger                             | × |
|    | SDG 3: Good Health and Well-Being              | × |
|    | SDG 4: Quality Education                       | √ |
|    | SDG 5: Gender Equality                         | × |
|    | SDG 6: Clean Water and Sanitation              | × |
|   | SDG 7: Affordable and Clean Energy             | × |
|  | SDG 8: Decent Work and Economic Growth         | × |
|  | SDG 9: Industry, Innovation and Infrastructure | √ |
|  | SDG 10: Reduced Inequalities                   | × |
|  | SDG 11: Sustainable Cities and Communities     | × |
|  | SDG 12: Responsible Consumption and Production | × |
|  | SDG 13: Climate Action                         | × |
|  | SDG 14: Life Below Water                       | × |
|  | SDG 15: Life on Land                           | × |
|  | SDG 16: Peace, Justice and Strong Institutions | × |
|  | SDG 17: Partnership for the Goals              | × |

**ETHICAL RULES WITH REGARD TO THE COURSE**

**Plagiarism Disclaimer**

Detected and undetected plagiarism is a serious offence at any time and it could have devastating effects on your degree result and future professional life.

Plagiarism is easy to avoid if you make sure you thoroughly identify and recognize your sources and do not copy from visual examples, designs or notes taken directly from your sources word for word. The maximum citation limit cannot exceed 20%. Artificial intelligence citations are also considered within this scope. If proven otherwise, the student will fail the course.

**ASSESSMENT DETAILS AND EVALUATION CRITERIA:**

Final Grades will be determined according to the Course Learning Activities and Final Examination/ Project/ Dissertation Assessment Details as below, and comply with the Education and Examination Regulation set forth by the University.

Throughout the course, students will learn the theoretical base of the topic and they will be able to equip themselves with the practical know-how skills of Advertisement production. Also, students are expected to design a creative advertisement piece with the knowledge they have gained in the course.

During the class sessions, participation is a very important input for the learning process for the students. It is also vital to understand the effect of creativity input on the production process of advertisement.

70% attendance to courses is compulsory. Health reports belong to 30% absenteeism right.

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| <b>PREPARED BY</b> | Dr.Masoud Moradi |
| <b>UPDATED</b>     | 28.03.2026       |
| <b>APPROVED</b>    |                  |