

ADVANCED PROGRAMMING

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| 1 | Course Title: | ADVANCED PROGRAMMING | |
| 2 | Course Code: | BIL2108 | |
| 3 | Type of Course: | Compulsory | |
| 4 | Level of Course: | First Cycle | |
| 5 | Year of Study: | 2 | |
| 6 | Semester: | 4 | |
| 7 | ECTS Credits Allocated: | 3.00 | |
| 8 | Theoretical (hour/week): | 2.00 | |
| 9 | Practice (hour/week): | 2.00 | |
| 10 | Laboratory (hour/week): | 0 | |
| 11 | Prerequisites: | - | |
| 12 | Language: | Turkish | |
| 13 | Mode of Delivery: | Face to face | |
| 14 | Course Coordinator: | Prof. Dr. ADEM UZUN | |
| 15 | Course Lecturers: | | |
| 16 | Contact information of the Course Coordinator: | Dr. Öğr. Üyesi Ömer Uysal omeruysal@uludag.edu.tr | |
| 17 | Website: | www.uzaktanogren.ademuzn.com | |
| 18 | Objective of the Course: | The purpose of this course is to give teacher candidates fundamental information about developing software applications including database and reporting using design principals and coding appropriate interface objects. | |
| 19 | Contribution of the Course to Professional Development: | It enables them to use the theories and applications specified in the purpose of the course in their professional practice. | |
| 20 | Learning Outcomes: | | |
| | | 1 | Uses detailed properties, events and methods of basic objects. |
| | | 2 | Designs effective interface |
| | | 3 | Manages constraints and validation of data input |
| | | 4 | Identifies basic concepts of database programming |
| | | 5 | Developes database applications using different programming approaches |
| | | 6 | Prepares suitable reports from database |
| | | 7 | |
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| 21 | Course Content: | | |
| | | Course Content: | |
| Week | Theoretical | Practice | |
| 1 | Basic controls in Visual Basic .NET | Using detailed properties, methods and events of Button, Textbox, RadioButton, Checkbox | |
| 2 | Basic controls in Visual Basic .NET | Using detailed properties, methods and events of Listbox and Combobox | |
| 3 | Working with forms in Visual Basic .NET | Using properties, methods and events of form object | |
| 4 | Interface design in Visual Basic .NET | Discussing effective interface design principals | |

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| 5 | Restriction and validation in Visual Basic .NET | An example of restriction an validation |
| 6 | Introduction to database programming in Visual Basic .NET | Definition of basic concepts of database programming. Discussing the purpose of database programming |
| 7 | Developing database applications in Visual Basic .NET using drag and drop | Applications of developing database applications using drag and drop |
| 8 | Using databinding in Visual Basic .NET | Applications of databinding |
| 9 | Using dataset designer in Visual Basic .NET | Applications of dataset designer |
| 10 | Using dataset designer in Visual Basic .NET 2010 | Creating methods in dataset designer |
| 11 | Connected database model in Visual Basic .NET | Creating connection objects, applications of querying database |
| 12 | Reporting Visual Basic .NET | Applications of reporting |
| 13 | A sample database application using Visual Basic .NET | Developing the sample application |
| 14 | A sample database application using Visual Basic .NET | Developing the sample application |

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| 22 | Textbooks, References and/or Other Materials: | Profesyonel Programlama Teknikleri .NET, 2007, Tansu Türkoğlu Visual Basic .NET Complete, 2002, Greg Jarboe, Hollis Thomases, Mari Smith, Chris Treadaway Dave Evans, Sybex Designing Enterprise Applications with Microsoft Visual Basic .NET, 2003, Robert Lan Oliver, Microsoft Press Visual Basic .NET Power Tools, Evangelos Petroustos, |
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| Activities | | Number | Duration (hour) | Total Work Load (hour) |
|--|----|--|-----------------|------------------------|
| THEORETICAL ACTIVITIES | | | | |
| Theoretical | 10 | 14 | 2.00 | 28.00 |
| Practicals/Labs | | 14 | 2.00 | 28.00 |
| Self-study and preparation | 40 | 4.00 | 1.00 | 4.00 |
| Homeworks | | 0 | 0.00 | 0.00 |
| Project Exam | 1 | 60 | 10.00 | 10.00 |
| Field Studies | | 0 | 0.00 | 0.00 |
| Midterm exams | | 40 | 10.00 | 10.00 |
| Contribution of Term (Year) Learning Activities to Success Grade | | 100 | | |
| Others | | 0 | 0.00 | 0.00 |
| Contribution of Final Exam to Success Grade | | 60 | 10.00 | 10.00 |
| Final Exams | | 100 | | |
| Total Work Load | | | | 90.00 |
| Total work load/ 30 hr | | | | 3.00 |
| Measurement and Evaluation Techniques Used in the | | Process evaluation will be applied during the period. Test | | |
| ECTS Credit of the Course | | | | 3.00 |

24 | ECTS / WORK LOAD TABLE

[illegible]

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| ÖK5 | 4 | 4 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| ÖK6 | 5 | 4 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| LO: Learning Objectives PQ: Program Qualifications | | | | | | | | | | | | | | | | |
| Contribution Level: | 1 very low | | | 2 low | | | 3 Medium | | | 4 High | | | 5 Very High | | | |