WELCOME

BAU
BAHÇEŞEHİR UNIVERSITY

Who are we?

BAU
BAHÇEŞEHİR UNIVERSITY

About The Faculty
Numbers & Departments

UNDERGRADUATE STUDENTS	GRADUATE STUDENTS	ACADEMIC STAFF
6000+	1100+	100+

- Software Engineering
- Computer Engineering
- Artificial Intelligence Engineering
- Electrical and Electronics Engineering
- Mechatronics Engineering
- Industrial Engineering
- Energy Systems Engineering
- Biomedical Engineering
- Management Engineering
- Civil Engineering
- Molecular Biology and Genetics
- Mathematics

BAU
BAHÇEŞEHİR UNIVERSITY

About The Faculty

Our Research Focus

BAU
BAHÇEŞEHİR UNIVERSITY

About The Department

Our Purpose

We are dedicated to raising engineers who can reveal user needs, design and develop software, use information technologies while solving real life problems in the industry and keep up with rapid changes in this field.

BAU
BAHÇEŞEHİR UNIVERSITY

About The Department
Our Objectives

The objectives of our department is to ensure that our graduates

- work in information technologies, engineering, consultancy and R&D staff of national or international companies,
- take part in original research activities in graduate programs of universities in Turkey or abroad,
- lead software projects at national or international level,
- establish information companies by using their entrepreneurial skills.

BAU
BAHÇEŞEHİR UNIVERSITY

About The Department

Academic Staff

Assoc. Prof. Dr.
Yücel Batu SALMAN
(Department Head)

Assoc. Prof. Dr.
Pınar SARISARAY
BÖLÜK

Assoc. Prof. Dr.
Ayla Gülcü

Assist. Prof. Dr.
Tamer UÇAR

Assist. Prof. Dr.
Betül ERDOĞDU
ŞAKAR

Assist. Prof. Dr.
Özge YÜCEL KASAP

Instructor
Duygu ÇAKIR

Research Assist.
Sevgi CANPOLAT

Research Assist.
Merve ARITÜRK

Research Assist.
Simge AKAY TEMUR

BAU
BAHÇEŞEHİR UNIVERSITY

Assoc. Prof. Dr. Yücel Batu SALMAN
(Department Chair)

Contact Information

Email:	batu.salman@eng.bau.edu.tr
Telephone:	+90 212 381 5690
Office No:	

CV (link):
http://akademik.bahcesehir.edu.tr/web/yucelbatusalman

Research Interests

- Human Computer Interaction
- Mobile Interaction Design
- User Experience
- Object Tracking
- Computer Vision
- Mobile Computing
- Project Management

Courses

- SEN3003 - Software Project Management (Undergraduate)
- SEN3304 – Human Computer Interaction (Undergraduate)
- SEN3006 - Software Architecture (Undergraduate)

BAU
BAHÇEŞEHİR UNIVERSITY

Assoc. Prof. Dr.
Pınar SARISARAY BÖLÜK

Contact Information

Email:	pinar.sarisaray@eng.bau.edu.tr
Telephone:	+90 212 381 0579
Office No:	D528

CV (link): http://akademik.bahcesehir.edu.tr/web/pinarsarisarayboluk

Research Interests

•Wireless Networks

•Wireless Sensor Networks

•Network Security

•Programming Languages (java, C++, C#, MATLAB, C/C++)

•Online Social Networks

Courses

- SEN2201 - Computing Systems (Undergraduate)
- SEN2006 - MS C# Laboratory (Undergraduate)
- BLG5625 - Linux ve Bilgisayar Ağları (Graduate)

BAU
BAHÇEŞEHİR UNIVERSITY

Assoc. Prof. Dr.
Ayla GÜLCÜ

Contact Information

Email:	ayla.gulcu@eng.bau.edu.tr
Telephone:	+90 212 381 0000
Office No:	D545

CV (link): http://akademik.bahcesehir.edu.tr/web/aylagulcu

Research Interests

- Meta learning and Few-shot learning
- Data mining & Machine learning
- Neural architecture search
- Meta-heuristics
- Multi-objective combinatorial optimization
- Reinforcement learning

Courses

- Introduction to Data Mining
- Python Programing Language
- Introduction to Data Science

BAU
BAHÇEŞEHİR UNIVERSITY

Assist. Prof. Dr. Tamer UÇAR

Contact Information

Email:	tamer.ucar@eng.bau.edu.tr
Telephone:	+90 212 381 0575
Office No:	D532

CV (link): http://akademik.bahcesehir.edu.tr/web/tamerucar

Research Interests

- Data Mining
- Recommender Systems
- Medical Data Analysis
- Big Data Analysis

Courses

- SEN1001 - Introduction to Programming (Java) (Undergraduate)
- SEN2104 - Database Management Systems (Undergraduate)
- SEN3004 - Web Programming (Undergraduate)
- SEN4406 - Advances in Web Programming (Undergraduate)
- YZM5610 - Bilgi Teknolojilerinde Proje Yönetimi (Graduate)
- YZM5511 - Bilgi Sistemleri Analiz ve Tasarımı (Graduate)

BAU
BAHÇEŞEHİR UNIVERSITY

Assist. Prof. Dr. Betül ERDOĞDU ŞAKAR

Contact Information

Email:	betul.erdogdu@eng.bau.edu.tr
Telephone:	+90 212 381 0589
Office No:	D521

CV (link):
http://akademik.bahcesehir.edu.tr/web/yucelbatusalman

Research Interests

- Data Mining
- Machine Learning
- Social Network Analysis
- Big Data Analysis

Courses

•SEN2211 - Data Structures and Algorithms I (Undergraduate)

•SEN2212 - Data Structures and Algorithms II (Undergraduate)

•SEN4018 - Data Science with Python (Undergraduate)

BAU
BAHÇEŞEHİR UNIVERSITY

Assist. Prof. Dr. Özge YÜCEL KASAP

Contact Information

Email:	ozge.yucelkasap@eng.bau.edu.tr
Telephone:	+90 212 381 0577
Office No:	D528

CV (link):
http://akademik.bahcesehir.edu.tr/web/ozgeyucelkasap

Research Interests

- Data Mining
- Recommendation Systems
- Programming Languages (Java, Python,C#)
- Big Data Analysis

Courses

- SEN1001 - Introduction to Programming (Java) (Undergraduate)
- SEN1011 - Introduction to Programming (Python) (Undergraduate)

BAU
BAHÇEŞEHİR UNIVERSITY

Instructor Duygu ÇAKIR

Contact Information

Email:	duygu.cakir@eng.bau.edu.tr
Telephone:	+90 212 381 0550
Office No:	D544

CV (link): http://akademik.bahcesehir.edu.tr/web/duygucakir

Research Interests

- Computer Vision
- Deep Learning
- Facial Expression Recognition
- Facial Action Unit Detection

Courses

- SEN1001 - Introduction to Programming (Java) (Undergraduate)
- SEN1011 - Introduction to Programming (Python) (Undergraduate)
- SEN1002 - Object Oriented Programming (JAVA) (Undergraduate)
- SEN3301 - Computer Graphics and Animation (Undergraduate)

BAU
BAHÇEŞEHİR UNIVERSITY

Research Assist. Sevgi CANPOLAT

Contact Information

Email:	sevgi.canpolat@eng.bau.edu.tr
Telephone:	+90 212 381 5660
Office No:	D Block, 4th Floor, Open Office

CV (link): http://akademik.bahcesehir.edu.tr/web/serkanayvaz

Research Interests

- Deep Learning in Computer Vision
- Convolutional Neural Networks for Visual Recognition
- Natural Language Processing
- Image Processing

Courses

- SEN1001 - Introduction to Programming (Java) (Undergraduate - Lab)
- SEN1002 - Object Oriented Programming (JAVA) (Undergraduate - Lab)
- SEN2104 - Database Management Systems (Undergraduate - Lab)
- SEN2211 - Data Structures and Algorithms I (Undergraduate - Lab)

BAU
BAHÇEŞEHİR UNIVERSITY

Research Assist. Merve ARITÜRK

Contact Information

Email:	merve.ariturk@eng.bau.edu.tr
Telephone:	+90 212 381 5663
Office No:	D Block, 4th Floor, Open Office

CV (link): http://akademik.bahcesehir.edu.tr/web/mervearitürk

Research Interests

- Deep Learning
- Neural Network
- Artificial Intelligence
- Natural Language Processing
- Autonomous Vehicle

Courses

- SEN1001 - Introduction to Programming (Java) (Undergraduate - Lab)
- SEN1011 - Introduction to Programming (Python) (Undergraduate - Lab)
- SEN2211 - Data Structures and Algorithms I (Undergraduate - Lab)
- SEN2212 - Data Structures and Algorithms II (Undergraduate - Lab)

BAU
BAHÇEŞEHİR UNIVERSITY

Research Assist. Simge AKAY TEMUR

Contact Information

Email:	simge.akay@eng.bau.edu.tr
Telephone:	+90 212 381 0553
Office No:	D Block, 4th Floor, Open Office

CV (link): http://akademik.bahcesehir.edu.tr/web/simgeakaytemur

Research Interests

- Machine Learning
- Deep Learning
- Computer Vision
- Facial Expression Analysis

Courses

- SEN1001 - Introduction to Programming (Java) (Undergraduate - Lab)
- SEN1011 - Introduction to Programming (Python) (Undergraduate - Lab)
- SEN2211 - Data Structures and Algorithms I (Undergraduate - Lab)
- SEN1002 - Object Oriented Programming (JAVA) (Undergraduate - Lab)

BAU
BAHÇEŞEHİR UNIVERSITY

Administrative Staff

Department Secretary

Dursun ARSLAN

Contact Information

Email:	dursun.arslan@eng.bau.edu.tr
Telephone:	+90 212 381 5658
Office No:	D308

He receives petition requests on academic issues and transmits them to the relevant units.

BAU
BAHÇEŞEHİR UNIVERSITY

Our Graduates

Our graduates find job opportunities in every institution from different sectors that require automation systems that benefit from software and similar technologies in addition to software development-oriented companies.

Details of the BAU alumni association can be found at:
https://mezun.bau.edu.tr/

BAU
BAHÇEŞEHİR UNIVERSITY

Courses

- Must Courses
- Departmental Elective Courses
- Non-departmental Elective Courses
- General Education Elective Courses

Please visit the following website for the full course list for your program

https://akts.bau.edu.tr/

BAU
BAHÇEŞEHİR UNIVERSITY

Courses
Must Courses

- Introduction to programming (Java)
- Object oriented programming (Java)
- Programming languages
- Computing Systems
- Data structures and algorithms
- Database management systems
- Software engineering analysis and design
- Software security
- Software project management
- Software architecture
- Human computer interaction
- Software verification and validation
- Capstone Project (2 semesters)
- Math courses
- Physics, Chemistry

BAU
BAHÇEŞEHİR UNIVERSITY

Courses
Departmental Elective Courses

- Data science with Python
- GUI programming with Python
- Advanced programming with python
- Web programming
- Unix programming
- Computer graphics and animation
- Introduction to game programming
- Introduction to data mining
- Big data
- Text mining
- Social network analysis
- COOP courses

BAU
BAHÇEŞEHİR UNIVERSITY

Tools you will use throughout your academic life

Online Education Platforms

- Microsoft Teams
- Itslearning
  - **https://buei.itslearning.com/**
- SAP
  - **https://st.bau.edu.tr/**

Software Development Tools

- Eclipse
- Oracle Sql Developer
- Microsoft Visual Studio
- Processing

BAU
BAHÇEŞEHİR UNIVERSITY

Laboratories

Apart from the computer labs that our students use in their daily work, our main laboratories are

- Big Data Education and Research Center
- Cyber Security Center
- BAU-Stanford Robotics Laboratory
- Machine Learning Research Laboratory

BAU
BAHÇEŞEHİR UNIVERSITY

CO-OP

CO-OP is a university and business world collaboration project started in November 2008, which enables BAU students to meet the professional world and also enables the business world to enter the university's corridors.

CO-OP KAMPÜSÜMİŞYERİM

https://coop.bau.edu.tr/en/

BAU BAHÇEŞEHİR UNIVERSITY

CO-OP

Branded Courses: Courses whose syllabi are created by BAU's partner firms and whose instructors are among their professional staff.

- Netaş
- Yapı Kredi Bank
- N11
- Samsung
- Vodafone
- Doğuş Technology
- Wissen Academy

- Application Development For Android Devices
- Application Development For IOS Devices
- Software Testing
- Data Warehouse
- Agile Project Management
- Mobile Telecommunications

Summer Training (Internship)

The aim of summer training (internship) is to enable students to apply their theoretical knowledge into real life systems. Students are also expected to have learned the basic duties and responsibilities of professional engineers during their internship periods.

- There will be one summer training period being 30 working days starting at the end of the third class.
- Internship must be related to Software Engineering.

BAU
BAHÇEŞEHİR UNIVERSITY

Summer Training (Internship)

- At the end of the training, students must write their internship reports using the report template and the essentials of report writing.
- Grading basis of Summer Training course is Pass/Fail.
- Details of the internship procedures can be found at:

https://bau.edu.tr/icerik/15858-staj

BAU
BAHÇEŞEHİR UNIVERSITY

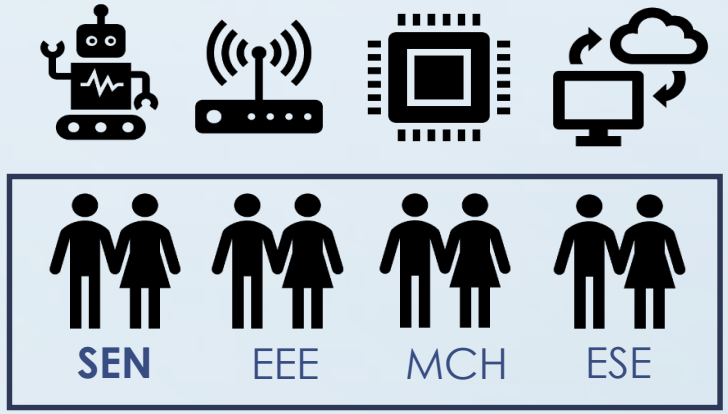
Capstone Project Course

As an outcome of an engineering education, a student should be able to solve and communicate a complex engineering problem in an interdisciplinary environment.

Stages of Capstone Project

4991 Capstone Project - I — **Team-building and design**

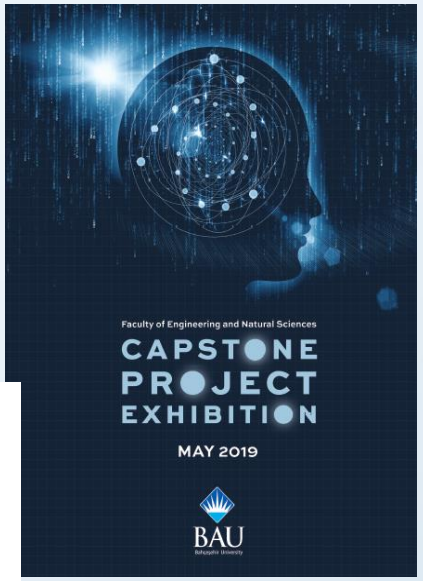
4992 Capstone Project - II — **Materialization and evaluation** → **Graduation**

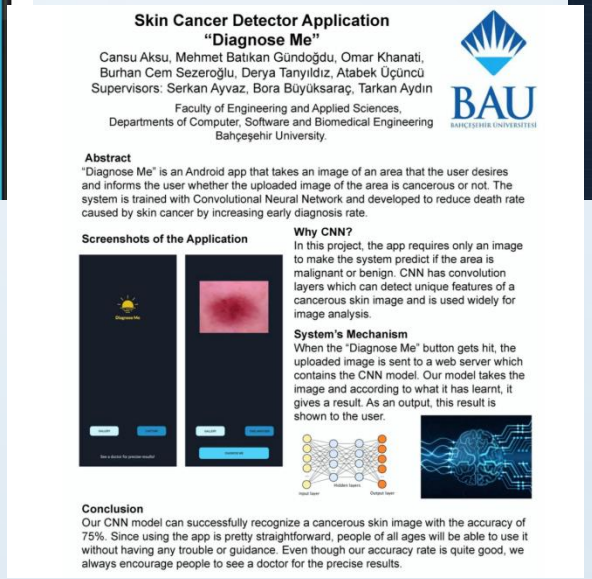


Web-site: capstone.eng.bau.edu.tr

BAU
BAHÇEŞEHİR UNIVERSITY

Capstone Project
Student Projects





https://bau.edu.tr/haber/16009-2019-2020-akademik-yili-capstone-bitirme-projesi-kitapcigi

BAU
BAHÇEŞEHİR UNIVERSITY

Double Major / Minor Programs

Double Major:

- If you complete a double-major, you will be graduating with two separate diplomas instead of one.
- You should be at the beginning of your 3rd, 4th, or 5th semester
- You should have a minimum GPA of 3.00
- You should be within the top %20 amongst your classmates in terms of GPA.

Minor:

- Completing a minor program grants you a certificate, not a diploma.
- You are supposed to pass six previously-determined courses of a particular degree to get the minor certificate.
- In order to apply for a minor degree, you should be at the beginning of your 3rd, 4th, 5th, or 6th semester
- You should have a minimum GPA of 2.50.

BAU
BAHÇEŞEHİR UNIVERSITY

Education Abroad

- BAU International Berlin – University of Applied Sciences (**Germany**)
- BAU International Academy of Rome (**Italy**)
- BAU Hong Kong Campus (**Hong Kong**)
- BAU Silicon Valley Campus (**USA**)
- BAU International University Washington DC (**USA**)

Details of the BAU Global:
http://international.bahcesehir.edu.tr/exchange/

BAU
BAHÇEŞEHİR UNIVERSITY

Erasmus

159 ERASMUS partner universities

25 different countries

Austria (5)	Finland (1)	Republic of Ireland (1)	Poland (13)	United Kingdom (8)
Belgium (5)	France (22)	Italy (8)	Portugal (3)	
Bulgaria (4)	Germany (33)	Latvia (4)	Romania (2)	
Croatia (1)	Greece (8)	Lithuania (5)	Slovenia (2)	
Czech Republic (1)	Holland (10)	Malta (1)	Spain (10)	
Denmark (6)	Hungary (2)	Norway (1)	Sweden (13)	

BAU
BAHÇEŞEHİR UNIVERSITY

World Exchange

45 World Exchange partner universities

24 different countries.

Australia (2)	Czech Republic (1)	India (1)	Pakistan (1)
Brazil (1)	England (4)	Republic of Ireland (1)	Scotland (2)
Canada (1)	France (2)	Italy (3)	South Korea (5)
Chile (1)	Germany (1)	Japan (4)	Spain (4)
China (2)	Ghana (1)	New Zealand (1)	Thailand (1)
Costa Rica (3)	Hong Kong (1)	Norway (1)	USA (11)

BAU
BAHÇEŞEHİR UNIVERSITY

Student Clubs

- Software and Informatics Club
- IEEE
- Sailing Club
- Energy Club
- Moleculer Biology and Genetics Club
- Engeenering and Technology Club
- Biomedical Club
- Industrial Engineering Club
- Aeronautics and Space Club
- …

https://bau.edu.tr/icerik/8474-ogrenci-dekanligi-kulupler-listesi

BAU
BAHÇEŞEHİR UNIVERSITY

Academic Calendar

It is the calendar for the announcement of registration renewal, exam dates, deadlines for academic issues and the dates of major events that will take place on campus.

To reach the Academic Calendar:

https://bau.edu.tr/content/2513-academic-calendar

BAU
BAHÇEŞEHİR UNIVERSITY

BAHÇEŞEHİR UNIVERSITY

FACULTY OF ENGINEERING AND NATURAL SCIENCES

SOFTWARE ENGINEERING DEPARTMENT

THANK YOU ☺