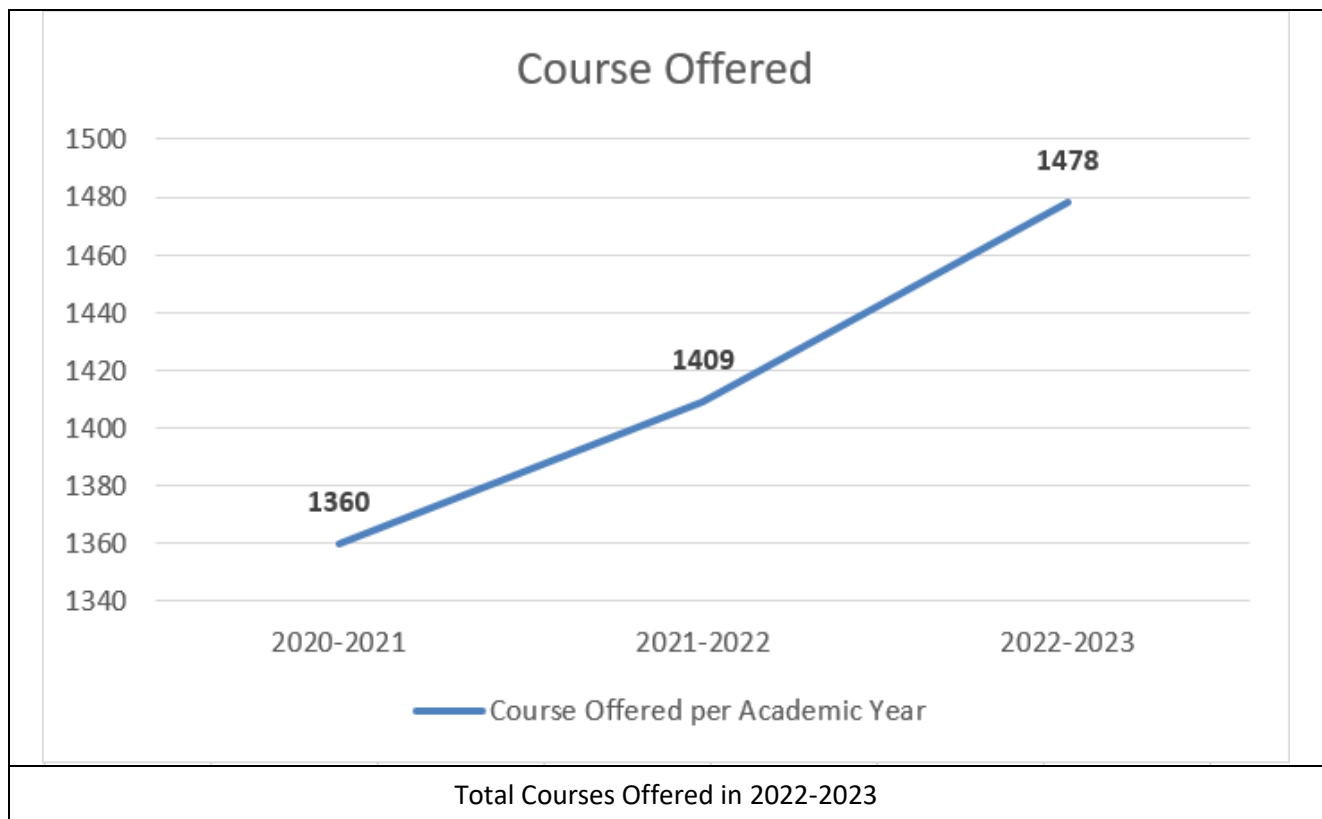# Template for Evidence(s)
# UI GreenMetric Questionnaire

University      :      Gebze Technical University
Country        :      Türkiye
Web Address   :      www.gtu.edu.tr

## [6] Education and Research (ED)

## [6.2] Total Number of Courses/Subjects Offered



Course Offered

Total Courses Offered in 2022-2023

| Course Code | Course Title | Course Code | Course Title |
|---|---|---|---|
| AERO 101 | Introduction to Aeronautical Engineering | ENGL 111 | English For Business Life |
| AERO 108 | Advanced Programming in Aeronautical Engineering | ENGL 112 | Academic English |
| AERO 234 | Electrical and Electronic Systems | ENT 501 | Fundamentals Of Entrepreneurship |
| AERO 241 | Principles of Thermodynamics | ENT 541 | Project Management in Business Administration |
| APS 505 | Gas Turbine Aerothermals I | ENVE 101 | Introduction to Environmental Engineering and Career Planning |
| APS 506 | Introduction to Systems Engineering | ENVE 204 | Environmental Microbiology |
| APS 515 | Advanced Topics in Aerospace Technologies | ENVE 311 | Understanding Climate Change and Solutions |
| APS 525 | Aerospace Standards and Qualifications | ENVE 407 | Sustainability Concepts in Environmental Engineering |
| ARCH 102 | Computer Applications in Architecture | ENVE 524 | Groundwater Pollution |
| ARCH 334 | Labor And Public Improvement Law | ENVE 532 | Mine Waste and Management |
| ARCH 532 | Criticism In Architecture | ENVE 625 | Biomass and Waste Technologies |
| ARCH 623 | Architecture, Modernity and Beyond | ENVE 653 | Sustainable Design Principles |
| ARCHF 166 | Design and Identity | EQE 519 | Dynamics Of Structures |
| ARCHF 286 | Society and Space | EQE 560 | Earthquake Resistant Design of Steel Structures |
| ARCHF 356 | Animation Methods in Architecture | EQE 672 | Fundamentals of Tsunamis and Their Hazard Assessment |

| Course Code | Course Title | Course Code | Course Title |
|---|---|---|---|
| ARCHF 436 | Ecological Planning in Architecture | EQE 681 | Seismic Hazard Assessment |
| ARCT 530 | Urban Design: An Urban Renewal Method | EQE 730 | Special Topics in Earthquake Engineering |
| ARCT 566 | Earthquake Resistant Design Principles | EQE 736 | Advanced Topics in Earthquake Engineering |
| BENG 100 | Bioengineering Orientation and Career Planning | ESC 502 | Introduction to Earth Sciences |
| BENG 215 | Python for Bioengineers | ESC 512 | Environmental Geology |
| BENG 312 | Bioprocess Engineering Principles | ESC 523 | Introduction to Atmospheric Physics |
| BENG 423 | Biomedical Electronics | ESC 529 | Modern Mapping Techniques in Earth Sciences |
| BENG 517 | Biomechanics | FS 101 | Occupational Health and Safety I |
| BENG 525 | Artificial Intelligence Techniques for Bioinformatics | FS 202 | Introduction to Philosophy of Management |
| BENG 613 | Genome Scale Metabolic Model | FS 301 | Quality Systems and Accreditation |
| BENG 666 | Wearable Technologies in Bioengineering | GEO 103 | Fundamentals of Surveying and Instruments |
| BTEC 521 | Entrepreneurship in Biotechnology | GEO 203 | Geodesy and Coordinate Systems |
| BTEC 554 | Biosensors | GEO 305 | Digital Image Processing |
| BTEC 652 | Forensic Technologies | GEO 417 | Microwave Sensing Systems |
| BTEC 682 | Metabolic and Cellular Engineering | GEOD 519 | Image Analysis Techniques and Their Applications in Remote Sensing |
| BUS 106 | Database Management in Business | GEOD 527 | Panoramic Image Acquisition and Processing Techniques |
| BUS 204 | Human Resource Management | GEOD 664 | Programming in GIS and Remote Sensing |
| BUS 304 | Management Information Systems | GEOD642 | Use of InSAR Method in Monitoring of Crustal Movements |
| BUS 453 | Total Quality Management | HIS 101 | Principles of Atatürk and the History of Turkish Revolution I |
| BUS 513 | Entrepreneurship and Small Business Management | IE 101 | Introduction to Industrial Engineering and Career Planning |
| BUS 531 | Marketing Management | IE 204 | Economics for Engineers II |
| BUS 601 | Advanced Research Techniques I | IE 302 | Simulation |
| BUS 629 | Change Management | IE 468 | Energy Policy, Planning and Markets |
| CE 102 | Technical Drawing for Civil Engineers | IE 516 | Supply Chain and Logistics Management |
| CE 231 | Materials Science for Civil Engineers | IE 517 | Production Systems Modelling and Design |
| CE 323 | Natural Hazards and Disasters | IE 612 | Introduction to Convex Optimization |
| CE 462 | Coastal and Harbor Structures Design | INF 100 | Introduction to Computer Systems |
| CE 529 | Soil Improvement Techniques | INF 212 | Algorithms and Programming II |
| CE 567 | Groundwater Hydraulics | ITF 503 | Economics Of International Trade |
| CE 627 | Recent Trends in Geotechnical Engineering | ITF 525 | E-Commerce |
| CE 648 | Research Methods in Construction Management | MAN 521 | Strategic Management |
| CED 101 | Introduction to Chemical Engineering and Career Planning | MAN 537 | Operation Research |
| CED 201 | Chemical Engineering Calculations | MATH 101 | Calculus I |
| CED 321 | Chemical Reaction Engineering | MATH 206 | Topology |
| CED 461 | Battery Technologies | MATH 305 | Partial Differential Equations |
| CED 512 | Mathematical Modelling Applications in Chemical Engineering | MATH 451 | Matrix Theory |
| CED 532 | Machine Learning for Energy Applications | MATH 517 | Ring Theory I |
| CED 618 | Bioenergy Synthesis | MATH 582 | Probability And Mathematical Statistics II |
| CED 627 | Advanced Electrochemical Technique | MATH 672 | Potential Theory |
| CHEM 106 | Organic Chemistry I | MATH 682 | Behavioral Properties of the Solutions of Nonlinear Parabolic Equations |
| CHEM 291 | Analytical Chemistry Laboratory I | MBG 101 | Principles of Biology |
| CHEM 306 | Biochemistry I | MBG 222 | Molecular Genetics I |
| CHEM 420 | Polymer Chemistry | MBG 333 | Molecular Cell Biology Laboratory |
| CHEM 428 | Green Chemistry | MBG 410 | Bacterial Ecology |
| CHEM 524 | Chemistry Of Nonmetals | MBG 512 | Biosafety And Bioethics |
| CHEM 568 | Liquid Crystals | MBG 572 | Bacterial Ecology |
| CHEM 613 | NMR Techniques and Applications | MBG 612 | Protein Trafficking |
| CHEM 614 | Clean Chemical Synthesis | MBG 632 | Cancer Molecular Genetics |
| CHEM 725 | Chemistry of Nanomaterials | ME 102 | Mechanical Engineering Freshman Project |
| CHEM 770 | Fluorescence Spectroscopy | ME 241 | Principles of Thermodynamics |
| CRP 111 | Introduction to City Planning | ME 314 | Introduction to Composite Materials |
| CRP 213 | Transportation Planning | ME 414 | Polymer Materials and Polymer Processing Techniques |
| CRP 314 | City and Environment | ME 520 | Fundamentals of Finite Element Analysis |
| CRP 436 | Urban Ecology and Planning | ME 541 | Heat Exchanger Design |
| CRP 516 | Geographical Information Systems | ME 623 | Continuum Mechanics |
| CRP 521 | Urban Morphology | ME 636 | Sustainable Machining |
| CSE 102 | Computer Programming | MSE 104 | Materials Science |
| CSE 232 | Logic Circuits and Design | MSE 204 | Crystal Chemistry |
| CSE 343 | Software Engineering | MSE 308 | Microstructural Characterization |
| CSE 470 | Cryptography and Computer Security | MSE 434 | Photovoltaic Energy Materials and Operating Principles |
| CSE 511 | Advanced Topics in Discrete Mathematics | MSE 518 | Surface Modification Techniques |
| CSE 557 | Data Mining | MSE 535 | Solid State Ionics |
| CSE 685 | Robot Control Theory | MSE 619 | Fracture Mechanics |

| Course Code | Course Title | Course Code | Course Title |
|---|---|---|---|
| CSE654 | Introduction to Natural Language and Speech Processing | MSE 627 | Sustainable Polymers |
| CYB 531 | Coding Theory | NANO 511 | Fundamentals of Nanoscience and Nanotechnology |
| CYB 572 | Network and Information Security | NANO 513 | Advanced Characterization Techniques in Nanotechnology |
| ECON 101 | Introduction to Economics I | NANO 615 | Nanophotonics |
| ECON 203 | Macroeconomics I | NANO 629 | Biopolymers Obtained from Sustainable Resources and Applications |
| ECON 322 | Development Economics | PES 140 | Voluntary Work |
| ECON 464 | Sustainability and Governance | PES 150 | Tennis I |
| ECON 507 | International Trade Theory and Policy | PES 160 | Swimming I |
| ECON 522 | Regional Economics | PES 180 | Basketball I |
| ECON 709 | International Economics | PHYS 111 | Elementary Physics I |
| ECON 714 | Game Theory | PHYS 203 | Waves and Optics |
| ELEC 101 | Introduction to Electronics Engineering and Career Planning | PHYS 330 | Introduction to Light Science |
| ELEC 234 | Logic Circuits and Design | PHYS 416 | Computer Applications in Physics |
| ELEC 323 | Electromechanical Energy Conversion | PHYS 513 | Experimental Techniques in Physics |
| ELEC 426 | Introduction to Electric Power Systems and Smart Grids | PHYS 520 | Quantum Mechanics I |
| ELEC 515 | Function Theory of Complex Variables for Engineers I | PHYS 612 | Lasers And Applications |
| ELEC 567 | Digital Signal Processing | PHYS 620 | Physics Of Thin Films |
| ELEC 641 | Localization Techniques | SSTR 541 | Management And Organizations |
| ELEC 665 | Wireless Optical Communication | SSTR 608 | Strategic Issues in the Modern Europe History |
| ENG 251 | Methodology Of Science | SSTR 651 | Strategic Management and Business Policy |
| ENG 262 | Engineering Applications in Industry | STEC 544 | Introduction to Radar and ELINT |
| ENG 266 | Environmental Literacy | STEC 581 | Autonomous Mobile Robots |
| ENG 310 | Global Warming and Climate Change | STEC 585 | Mechatronic System Design |
| ENG 311 | Introduction to Global Warming and Climate Change | TUR 101 | Turkish I |
| ENG 460 | Introduction to Photography | TUR 102 | Turkish II |

Examples of Courses Offered in 2022-2023

## Description:

Total number of courses offered in 2022-2023 academic year = 1478 courses

| Academic Year | Total Number of Courses |
|---|---|
| 2020-2021 | 1360 |
| 2021-2022 | 1409 |
| 2022-2023 | 1478 |