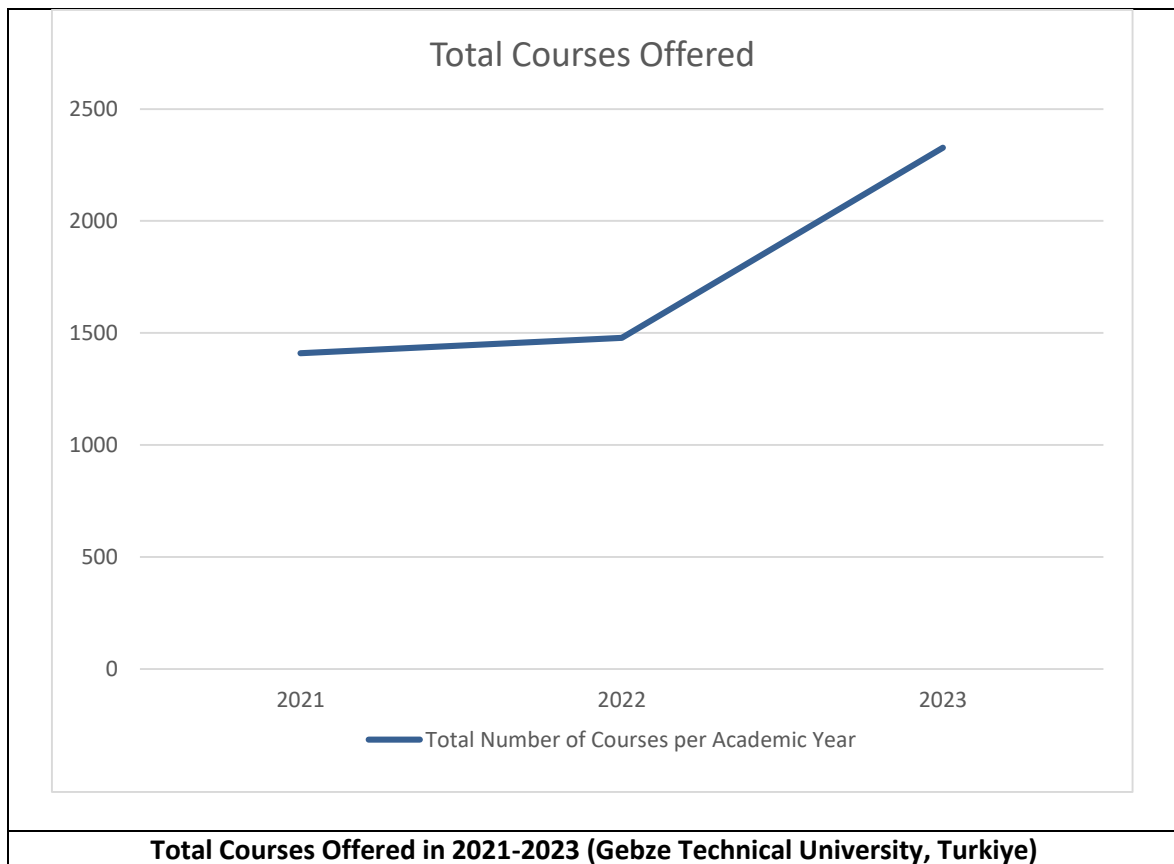


## Template for Evidence(s) UI GreenMetric Questionnaire

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

### [6] Education and Research (ED)

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



Some of the courses

1	Department	Course Cod	Course Title
65	Architecture	ARCHF 226	Industrial Revolution and Urban Transformation
66	Architecture	ARCHF 236	3 Dimensional Modelling Techniques
67	Architecture	ARCHF 246	Basic Art Education
68	Architecture	ARCHF 256	Human Factors in Design
69	Architecture	ARCHF 266	Art Criticism
70	Architecture	ARCHF 276	Sketch Techniques
71	Architecture	ARCHF 296	Technology Art and Design
72	Architecture	ARCHF 316	Design For All
73	Architecture	ARCHE 336	Portfolio Design

Some of the courses

Some of the courses

1	Department	Course Cod	Course Title
2	Aeronautical Engineering	AERO 101	Introduction to Aeronautical Engineering
3	Aeronautical Engineering	AERO 102	Freshman Project
4	Aeronautical Engineering	AERO 104	Computer Aided Drawing
5	Aeronautical Engineering	AERO 107	Computational Systems in Aeronautical Engineering
6	Aeronautical Engineering	AERO 108	Advanced Programming in Aeronautical Engineering
7	Aeronautical Engineering	AERO 209	Engineering Statistics
8	Aeronautical Engineering	AERO 211	Materials Science for Engineers
9	Aeronautical Engineering	AERO 212	Strength of Materials
10	Aeronautical Engineering	AERO 231	Statics
11	Aeronautical Engineering	AERO 232	Dynamics
12	Aeronautical Engineering	AERO 234	Electrical and Electronic Systems
13	Aeronautical Engineering	AERO 241	Principles of Thermodynamics
14	Aeronautical Engineering	AERO 242	Principles of Heat Transfer
15	Aeronautical Engineering	AERO 304	Measurement and Instrumentation
16	Aeronautical Engineering	AERO 312	Aircraft Structures
17	Aeronautical Engineering	AERO 323	Design of Machine Elements
18	Aeronautical Engineering	AERO 324	Principles of Aircraft Design
19	Aeronautical Engineering	AERO 331	System Dynamics and Vibration
20	Aeronautical Engineering	AERO 332	Control Systems Theory

1	Department	Course Cod	Course Title
44	Bioengineering	BENG 460	Advanced Methods in Yeast Genetics
45	Bioengineering	BENG 461	Molecular Genetics
46	Bioengineering	BENG 462	Fundamental Methods for Biofabrication
47	Bioengineering	BENG 463	Protein Engineering
48	Bioengineering	BENG 464	Advanced Bioprocess Design
49	Bioengineering	BENG 465	Advanced Applications of Biomaterials Lab
50	Bioengineering	BENG 466	Structural Bioinformatics and Computational Drug Design
51	Bioengineering	BENG 467	Biosorption
52	Bioengineering	BENG 468	Mammalian Cell Cultures for Biopharmaceutical Production
53	Bioengineering	BENG 477	Innovation for Sustainable Agriculture and Food Security
54	Bioengineering	BENG 491	Graduation Project I
55	Bioengineering	BENG 492	Graduation Project II
56	Bioengineering	BENG 514	Microbial Genetics
57	Bioengineering	BENG 515	Yeast Genetics and Cell Biology
58	Bioengineering	BENG 517	Biomechanics
59	Bioengineering	BENG 518	Computer Aided Design and Rapid Prototyping in Bioengineering
60	Bioengineering	BENG 519	Applied Bioinformatics
61	Bioengineering	BENG 520	Computational Neuroscience
62	Bioengineering	BENG 521	Biomedical Instrumentation

1	Department	Course Cod	Course Title
17	City and Regional Planning	CRP 109	Career planning
18	City and Regional Planning	CRP 111	Introduction to Urban Planning
19	City and Regional Planning	CRP 112	History of Settlements
20	City and Regional Planning	CRP 113	Urban Sociology
21	City and Regional Planning	CRP 114	Introduction to Information and Communication Technologies
22	City and Regional Planning	CRP 115	Urban Geography
23	City and Regional Planning	CRP 119	Mathematics I
24	City and Regional Planning	CRP 120	Mathematics II
25	City and Regional Planning	CRP 121	Architectural Expression Techniques
26	City and Regional Planning	CRP 123	Basic design
27	City and Regional Planning	CRP 170	Surveying and Map Information

Some of the courses

Some of the courses

1	Department	Course Cod	Course Title
44	Civil Engineering	CE 465	Highway Drainage and Hydraulics
45	Civil Engineering	CE 466	Marine Hazards and Tsunamis
46	Civil Engineering	CE 491	Graduation Project I
47	Civil Engineering	CE 492	Graduation Project II
48	Civil Engineering	CE 521	Soil Dynamics
49	Civil Engineering	CE 523	Numerical Modeling in Geo-Structures
50	Civil Engineering	CE 524	Advanced Soil Mechanics
51	Civil Engineering	CE 526	Retaining Structures and Slopes
52	Civil Engineering	CE 527	Advanced Foundation Engineering
53	Civil Engineering	CE 529	Soil Improvement Techniques
54	Civil Engineering	CE 533	Strength and Deformation of Structural Concrete
55	Civil Engineering	CE 534	Non-destructive Testing and Evaluation
56	Civil Engineering	CE 541	Economic Decision Analysis
57	Civil Engineering	CE 547	Lean Construction

1	Department	Course Cod	Course Title
50	Chemical Engineering	CED 529	Statistical Experimental Analysis
51	Chemical Engineering	CED 531	Sensory Analysis in Food and Chemical Engineering I
52	Chemical Engineering	CED 532	Machine Learning for Energy Applications
53	Chemical Engineering	CED 542	Microchemical and Microfluidic Systems
54	Chemical Engineering	CED 543	Thermochemical Biomass Conversion Processes
55	Chemical Engineering	CED 551	Hydrogen and Fuel Cells
56	Chemical Engineering	CED 552	Sensory Analysis in Food and Chemical Engineering II
57	Chemical Engineering	CED 553	Conventional and Renewable Energy Technologies
58	Chemical Engineering	CED 591	Seminar I
59	Chemical Engineering	CED 592	Seminar II
60	Chemical Engineering	CED 599	Thesis Study
61	Chemical Engineering	CED 611	Advanced Transport Phenomena
62	Chemical Engineering	CED 612	Advanced Applied Mathematics In Chemical Engineering
63	Chemical Engineering	CED 613	Advanced Topics In Chemical Reactor Design
64	Chemical Engineering	CED 614	Mass Transfer

1	Department	Course Cod	Course Title
2	Chemistry	CHEM 101	General Chemistry I
3	Chemistry	CHEM 102	General Chemistry II
4	Chemistry	CHEM 113	General Chemistry Laboratory I
5	Chemistry	CHEM 114	General Chemistry Laboratory II
6	Chemistry	CHEM 116	Applied Organic Chemistry
7	Chemistry	CHEM 201	Analytical Chemistry I
8	Chemistry	CHEM 202	Analytical Chemistry II
9	Chemistry	CHEM 203	Organic Chemistry I
10	Chemistry	CHEM 204	Organic Chemistry II
11	Chemistry	CHEM 205	Inorganic Chemistry I
12	Chemistry	CHEM 206	Inorganic Chemistry II
13	Chemistry	CHEM 291	Analytical Chemistry Laboratory I
14	Chemistry	CHEM 292	Analytical Chemistry Laboratory II
15	Chemistry	CHEM 293	Organic Chemistry Laboratory I
16	Chemistry	CHEM 305	Organic Chemistry III

Some of the courses

Some of the courses

1	Department	Course Cod	Course Title
113	Computer Engineering	CSE 625	Parallel Computing
114	Computer Engineering	CSE 626	Symbolic Computation
115	Computer Engineering	CSE 627	Mathematical Modelling
116	Computer Engineering	CSE 629	Special Topics in Algorithms and Theory
117	Computer Engineering	CSE 637	Digital Signal Processors
118	Computer Engineering	CSE 649	Special Topics In Software Engineering And Systems
119	Computer Engineering	CSE 651	Detection and Estimation Theory
120	Computer Engineering	CSE 654	Inroduction to Natural Language and Speech Processing
121	Computer Engineering	CSE 655	Deep Learning and Applications
122	Computer Engineering	CSE 657	Text Mining
123	Computer Engineering	CSE 661	Advanced Computer Graphics
124	Computer Engineering	CSE 662	Computer Animation
125	Computer Engineering	CSE 666	Multiview Geometry For Computer Vision
126	Computer Engineering	CSE 669	Advanced Topics In Computer Vision And Multimedia
127	Computer Engineering	CSE 672	Advanced Computer Networks
128	Computer Engineering	CSE 673	Data And Network Security
129	Computer Engineering	CSE 674	Network Protocols

Department	Course Cod	Course Title
Climate Change	CLC 514	Meteorology and Climate
Climate Change	CLC 516	Hydrology
Climate Change	CLC 517	Special Topics in Paleoclimatology
Climate Change	CLC 519	Climate Data Monitoring and Statistical Analysis
Climate Change	CLC 520	Extreme Weather Events and Natural Disasters
Climate Change	CLC 521	Aeronautical Meteorology
Climate Change	CLC 523	Climate, Energy and Environment
Climate Change	CLC 524	Natural Capital Accounting
Climate Change	CLC 526	Climate Change Mitigation: Renewable Energy Sources
Climate Change	CLC 527	Current Issues in Climate Change

1	Department	Course Cod	Course Title
2	Cybersecurity Analytics and Operations	CSV 101	Fundamentals of Programming I
3	Cybersecurity Analytics and Operations	CSV 102	Fundamentals of Programming II
4	Cybersecurity Analytics and Operations	CSV 103	Fundamentals of Information and Networking Technology
5	Cybersecurity Analytics and Operations	CSV 104	Database Applications and Security
6	Cybersecurity Analytics and Operations	CSV 105	Operating Systems and Security
7	Cybersecurity Analytics and Operations	CSV 106	Secure Network Design and Device Management
8	Cybersecurity Analytics and Operations	CSV 107	Mathematics and Logic
9	Cybersecurity Analytics and Operations	CSV 108	Virtualization and Cloud Technologies
10	Cybersecurity Analytics and Operations	CSV 109	Introduction to Cybersecurity
11	Cybersecurity Analytics and Operations	CSV 201	Penetration Testing
12	Cybersecurity Analytics and Operations	CSV 202	Cyber Incident Management
13	Cybersecurity Analytics and Operations	CSV 203	Mobile Technologies and Security
14	Cybersecurity Analytics and Operations	CSV 205	Cybersecurity Governance
15	Cybersecurity Analytics and Operations	CSV 207	Secure Software Development
16	Cybersecurity Analytics and Operations	CSV 211	Effective Communication and Presentation Techniques
17	Cybersecurity Analytics and Operations	CSV 213	Project Management Methodology and Applications
18	Cybersecurity Analytics and Operations	CSV 214	Entrepreneurship and Career Planning

Some of the courses



Some of the courses

Department	Course Cod	Course Title
Cyber Security	CYB 501	Introduction to Information Security and Cryptography
Cyber Security	CYB 502	Discrete Mathematics
Cyber Security	CYB 503	Probability Theory
Cyber Security	CYB 504	Computer Networks
Cyber Security	CYB 505	Data Structures and Algorithms
Cyber Security	CYB 511	Advanced Topics in Discrete Mathematics
Cyber Security	CYB 521	Algorithms and Complexity Analysis
Cyber Security	CYB 531	Coding Theory
Cyber Security	CYB 532	Advanced Topics in Cryptography
Cyber Security	CYB 533	Symmetric Encryption Algorithms and Security Analysis
Cyber Security	CYB 542	Authentication in Cyber Security
Cyber Security	CYB 551	Information Warfare
Cyber Security	CYB 552	Data Mining for Cyber Security
Cyber Security	CYB 562	Information Security Management
Cyber Security	CYB 569	Special Topics in Information Security

Department	Course Cod	Course Title
Earth and Marine Sciences	ESC 501	Research Methods and Publication Ethics
Earth and Marine Sciences	ESC 502	Introduction to Earth Sciences
Earth and Marine Sciences	ESC 511	Fundamentals of Earth Science and Engineering
Earth and Marine Sciences	ESC 512	Environmental Geology
Earth and Marine Sciences	ESC 513	Watershed Management
Earth and Marine Sciences	ESC 514	Advanced Geochemistry
Earth and Marine Sciences	ESC 515	Geographic Information System (GIS) Applications in Earth Science
Earth and Marine Sciences	ESC 520	Military Geology
Earth and Marine Sciences	ESC 521	Physical Climatology
Earth and Marine Sciences	ESC 522	Lake Water Quality Management
Earth and Marine Sciences	ESC 523	Introduction to Atmospheric Physics
Earth and Marine Sciences	ESC 524	Limnology
Earth and Marine Sciences	ESC 525	Partial Differential Equations in Earth Sciences
Earth and Marine Sciences	ESC 526	Methods in Geophysics
Earth and Marine Sciences	ESC 527	Quaternary Geology
Earth and Marine Sciences	ESC 528	Advanced Topics in Geomorphology
Earth and Marine Sciences	ESC 529	Modern Mapping Techniques in Earth Sciences
Earth and Marine Sciences	ESC 530	Scientific Programming and Data Analysis for Earth Sciences
Earth and Marine Sciences	ESC 591	Seminar I
Earth and Marine Sciences	ESC 592	Seminar II
Earth and Marine Sciences	ESC 599	Thesis Study
Earth Sciences	EMS 611	Physics of the Earth
Earth Sciences	EMS 612	Geophysical Data Processing

1	Department	Course Cod	Course Title
6	Economics	ECON 201	Microeconomics I
7	Economics	ECON 202	Microeconomics II
8	Economics	ECON 203	Macroeconomics I
9	Economics	ECON 204	Macroeconomics II
10	Economics	ECON 205	Mathematics for Social Sciences I
11	Economics	ECON 206	Mathematics for Social Sciences II
12	Economics	ECON 207	Statistics I
13	Economics	ECON 208	Statistics II
14	Economics	ECON 241	Entrepreneurship
15	Economics	ECON 253	Humanities I
16	Economics	ECON 254	Humanities II
17	Economics	ECON 301	Econometrics I
18	Economics	ECON 302	Econometrics II
19	Economics	ECON 303	International Economics I
20	Economics	ECON 304	International Economics II
21	Economics	ECON 311	Labor Economics

Some of the courses

Some of the courses

1	Department	Course Cod	Course Title
8	Electronics Engineering	ELEC 231	Electronic Devices
9	Electronics Engineering	ELEC 234	Logic Circuits and Design
10	Electronics Engineering	ELEC 235	Logic Circuit Design Laboratory
11	Electronics Engineering	ELEC 236	Electronics I
12	Electronics Engineering	ELEC 237	Electronics I Laboratory
13	Electronics Engineering	ELEC 264	Signals And Systems
14	Electronics Engineering	ELEC 322	Control Systems
15	Electronics Engineering	ELEC 323	Electromechanical Energy Conversion
16	Electronics Engineering	ELEC 334	Microprocessors
17	Electronics Engineering	ELEC 335	Microprocessors Laboratory
18	Electronics Engineering	ELEC 336	Electronics II
19	Electronics Engineering	ELEC 337	Electronics II Laboratory
20	Electronics Engineering	ELEC 341	Electromagnetic Field Theory
21	Electronics Engineering	ELEC 342	Electromagnetic Wave Theory
22	Electronics Engineering	ELEC 361	Analog Communication Systems
23	Electronics Engineering	ELEC 365	Fundamentals Of Digital Communication
24	Electronics Engineering	ELEC 366	Communication Laboratory
25	Electronics Engineering	ELEC 367	The Fundamentals Of Digital Signal Processing

1	Department	Course Cod	Course Title
2	Geomatics Engineering	GEO 101	Introduction to Geomatics Engineering and Career Planning
3	Geomatics Engineering	GEO 102	Surveying Applications
4	Geomatics Engineering	GEO 103	Fundamentals of Surveying and Instruments
5	Geomatics Engineering	GEO 201	Cartography
6	Geomatics Engineering	GEO 202	Cadastr
7	Geomatics Engineering	GEO 203	Geodesy and Coordinate Systems
8	Geomatics Engineering	GEO 204	Computer Aided Map Design
9	Geomatics Engineering	GEO 205	Positioning Methods and GNSS
10	Geomatics Engineering	GEO 206	Fundamentals of Levelling
11	Geomatics Engineering	GEO 207	Databases in Engineering
12	Geomatics Engineering	GEO 208	Programming in Geomatics Engineering
13	Geomatics Engineering	GEO 209	Real Estate's Law
14	Geomatics Engineering	GEO 210	Geomatics Engineering Project I
15	Geomatics Engineering	GEO 211	Probability and Statistics for Geomatics Engineering
16	Geomatics Engineering	GEO 212	Remote Sensing I
17	Geomatics Engineering	GEO 301	Land Readjustment
18	Geomatics Engineering	GEO 302	Geodesy an Projection Systems
19	Geomatics Engineering	GEO 303	Theory of Errors and Adjustment Computations

1	Department	Course Cod	Course Title
74	Management	BUS 531	Marketing Management
75	Management	BUS 534	Consumer Behaviour
76	Management	BUS 536	Operations Management
77	Management	BUS 537	Operations Research
78	Management	BUS 538	Logistics Management
79	Management	BUS 539	Decision Support Systems
80	Management	BUS 541	Financial Management
81	Management	BUS 544	Management Accounting
82	Management	BUS 545	Cost Accounting
83	Management	BUS 548	Business Analysis
84	Management	BUS 551	Project Management In Business Administration
85	Management	BUS 561	Conflict Management And Negotiation Skills/ Turkis
86	Management	BUS 563	Ethics In Business Life
87	Management	BUS 565	Personal Selection And Placement
88	Management	BUS 569	The European Union for Business Leaders
89	Management	BUS 573	Leadership in Digital Age
90	Management	BUS 574	Business Analytics
91	Management	BUS 583	Marketing Management
92	Management	BUS 586	Total Quality Management
93	Management	BUS 590	Graduation Project

Some of the courses

Some of the courses

1	Department	Course Cod	Course Title
2	Materials Science and Engineering	MSE 101	Introduction to Materials Science and Career Planning
3	Materials Science and Engineering	MSE 102	Materials Engineering
4	Materials Science and Engineering	MSE 104	Materials Science
5	Materials Science and Engineering	MSE 201	Materials Science I
6	Materials Science and Engineering	MSE 202	Materials Science II
7	Materials Science and Engineering	MSE 204	Crystal Chemistry
8	Materials Science and Engineering	MSE 211	Thermodynamics Of Materials I
9	Materials Science and Engineering	MSE 212	Thermodynamics Of Materials II
10	Materials Science and Engineering	MSE 221	Mechanics Of Materials
11	Materials Science and Engineering	MSE 301	Solid State Physics for Engineers
12	Materials Science and Engineering	MSE 308	Microstructural Characterization
13	Materials Science and Engineering	MSE 311	Phase Diagrams
14	Materials Science and Engineering	MSE 321	Mechanical Behaviour Of Materials
15	Materials Science and Engineering	MSE 335	Electrical, Optical And Magnetic Properties Of Materials
16	Materials Science and Engineering	MSE 341	Processing Of Metals
17	Materials Science and Engineering	MSE 345	Metal Laboratory
18	Materials Science and Engineering	MSE 351	Kinetic Processes In Materials I
19	Materials Science and Engineering	MSE 352	Kinetic Processes Of Materials II

1	Department	Course Cod	Course Title
74	Mathematics	MATH 563	Graph Theory
75	Mathematics	MATH 565	Combinatorial Design Theory
76	Mathematics	MATH 567	Algebraic Graph Theory
77	Mathematics	MATH 571	General Topology
78	Mathematics	MATH 575	Algebraic Topology
79	Mathematics	MATH 581	Probability And Mathematical Statistics I
80	Mathematics	MATH 582	Probability And Mathematical Statistics II
81	Mathematics	MATH 587	Mathematical Background and Applications of Neural Networks
82	Mathematics	MATH 590	Introduction to Hamiltonian Formulation of Differential Equations
83	Mathematics	MATH 591	Seminar I
84	Mathematics	MATH 592	Seminar II
85	Mathematics	MATH 595	Tensor Analysis and General Relativity
86	Mathematics	MATH 599	Thesis Study
87	Mathematics	MATH 614	Numerical Analysis II
88	Mathematics	MATH 616	Algebra II
89	Mathematics	MATH 618	Ring Theory II
90	Mathematics	MATH 619	Module Theory II
91	Mathematics	MATH 621	Lattice Theory

Department	Course Cod	Course Title
Smart City and Transportation Technologies	TTI 511	Smart City Infrastructure and Components
Smart City and Transportation Technologies	TTI 512	Intelligent Transportation Systems
Smart City and Transportation Technologies	TTI 513	Data Management in Smart Cities
Smart City and Transportation Technologies	TTI 514	Modeling and Statistical Data Analysis in Smart City Applications
Smart City and Transportation Technologies	TTI 515	Communication Technologies and Network Infrastructure in Smart Cities
Smart City and Transportation Technologies	TTI 517	Traffic Engineering
Smart City and Transportation Technologies	TTI 518	Traffic Management
Smart City and Transportation Technologies	TTI 519	Entrepreneurship in Smart City and Transportation Technologies
Smart City and Transportation Technologies	TTI 523	Transportation Systems Analysis
Smart City and Transportation Technologies	TTI 591	Seminar I

Some of the courses (Gebze Technical University, Turkiye)

**Description:**

Total number of courses offered at GTU in 2023 = 2327 courses

You can also access the file containing detailed names and sections of all courses offered at GTU in 2023 here:  
<https://sustainable.gtu.edu.tr/sustainable/allCourses>

2021	1409
2022	1478
2023	2327