

University Northern Technical

الجامعة التقنية الشمالية



Firs First Cycle – Bachelor's Degree in Oil and Gas Economics Technology

بكالوريوس تقنيات اقتصاديات النفط والغاز



جدول المحتويات Table of Contents

1. Mission & Vision Statement	بيان المهمة والرؤية
2. Program Specification	مواصفات البرنامج
3. Program (Objectives) Goals	أهداف البرنامج
4. Student learning outcomes	مخرجات تعلم الطالب
5. Academic Staff	الهيئة التدريسية
6. Credits, Grading and GPA	الاعتمادات والدرجات والمعدل التراكمي
7. Modules	المواد الدراسية
8. Contact	اتصال

1. **Mission & Vision Statement**

Vision Statement

The Department of Oil and Gas Economics Technology aims to provide distinguished academic education and advanced scientific research in the oil and gas fields, with a focus on developing students' technical and analytical skills. The department seeks to provide students with the knowledge necessary to understand the economic and technical challenges in the energy industry and enhance their ability to make strategic decisions in this vital sector..

We strive to be a leader in providing advanced educational and research programs in the field of oil and gas economics, contributing to the development of human resources capable of meeting global challenges in the energy industry. We aspire to collaborate with academic and industrial institutions to promote innovation and sustainability in this field, contributing to achieving sustainable development and supporting the national economy.

Mission Statement

We strive to be a leader in providing advanced educational and research programs in the field of oil and gas economics, contributing to the development of human resources capable of meeting global challenges in the energy industry. We aspire to collaborate with academic and industrial institutions to promote innovation and sustainability in this field, contributing to achieving sustainable development and supporting the national economy.

2. Program Specification

Program code:	BMT	ECTS	240
Duration:	4 levels, 8 Semesters	Method of Attendance:	Full Time

Level 1 Level 1: This foundation year introduces students to the fundamentals of oil and gas economics techniques and is suitable for progression to all programs in the Economics and Oil and Gas Economics group. The core topics of each program are covered, preparing students for more specialized research units in subsequent years.

Levels 2, 3, and 4: At these levels, students are free to choose their core and elective modules, provided they select a combination of modules that reflect the vision and requirements of the Oil and Gas Economics and Applications Technology specialization. This ensures the breadth of knowledge expected of a graduate with a degree in Oil and Gas Economics Technology.

Research Ethos and Practical Skills: The research ethos is developed and fostered from the start through practical, which are either embedded in lecture modules or taught in dedicated practical modules, research seminars, and tutorials. There is a compulsory project in Level 1 that students must pass to progress into Level 2, and optional projects in Levels 2, 3, and 4. At Level 4, all students carry out an independent research project, which may be a credit-based library or data analysis project, or a field or laboratory-based project.

Academic Tutorials: These are held at Levels 1 and 2 with the same tutor, who is also the personal tutor, providing continuity and progressive guidance. Level 1 and 2 tutorials include a number of workshops to teach skills, such as oil market analysis skills, as well as demand and supply, and the use of econometric models and statistical software in analyzing these data and figures, followed by assessment exercises such as essays and presentations, which provide opportunities to practice these skills in a specific topic context.

Field Experience and Practical Application: There is a compulsory practical project in Level 1 that students must pass to progress into Level 2, with optional field projects in Levels 2, 3, and 4. At Level 4, all students undertake an independent research project, which can be a credit-based library or data analysis project, or a field or laboratory-based project.

International Years and Industrial Placements: The program also offers opportunities for international years and industrial placements. Individual needs are discussed with the appropriate tutor and accommodated wherever possible.

Graduates of the Oil and Gas Economics Technology program are trained to understand how research contributes to teaching, in alignment with the mission of the university and college. This comprehensive approach ensures that graduates are well-prepared for careers and graduate studies in the field of Oil and Gas Economics Technology.

3. **Program Objectives: using Bloom Theory**

- Providing the department's graduates with the necessary scientific and technical skills and knowledge that will help them practice their professional lives at the highest levels.
 - Providing academic programs that provide high-quality educational opportunities that align with the department's vision and mission, with the aim of introducing students to recent developments in the field of oil and gas and sustainable development, as well as the necessary technologies and skills required by graduates of this department.
 - Preparing specialized technical cadres in oil and gas economics techniques capable of leading the public and private sectors using modern technologies and methods in various economic fields and sectors, especially the oil and gas sector.
 - Developing and nurturing creative and innovative thinking among students to help them make economic decisions in the country using a sound scientific approach, and building and nurturing leadership personality among students to deal with individuals in the work environment.

1- Knowledge:

1- Understanding the basic principles and theories of economics, with a focus on oil and gas economics techniques, including extraction, production, and distribution, as well as how to sustain economic resources and the use of econometric analysis methods in economics, as these tools contribute to enhancing the knowledge of graduates of this department, enabling them to become leaders in the field of oil and gas economics.

2-Comprehension:

Understanding: Providing academic programs that offer high-quality educational opportunities, in line with the department's vision and mission, with the aim of introducing students to the latest developments in knowledge in the field of oil and gas economics, technologies, and skills necessary to strengthen students' knowledge.

3-Application:

Applications: Using technical applications in the fields of oil and gas extraction, production, marketing, and resource development to ensure the achievement of sustainable development goals that enhance the country's economic strength and means of sustainable growth.

4-Analysis:

Analyzing the problems facing the local and global economy in the field of oil and gas economics, relying on real tools and actual figures that contribute to providing a clear picture of the economic situation of the country and the global economy, especially in the field of oil and gas economics technologies.

5-Synthesis:

Creating specialized solutions in the fields of oil and gas economic acquisitions to ensure resource sustainability, enhance state revenues, and achieve sustainable economic growth.

6-Evaluation:

Evaluating oil and gas economics technologies includes understanding how to advance the local economy through efficient management of these resources and effective planning to improve revenues and reduce the depletion of economic resources, thus promoting sustainable development.

7-Communication:

Communicate effectively and collaborate in multidisciplinary teams, presenting information clearly and concisely.

8-Professional and Academic Preparedness:

Prepare for career paths and advanced studies by demonstrating the necessary skills and knowledge required for roles such as training programs in local oil institutions and companies, which will contribute to linking the student's theoretical and practical aspects and enhance the student's awareness within the work environment.

9-Ethical and Social Responsibility:

Assessing the ethical and social impacts of economic practices and economic sectors, and ensuring responsible and informed decisions that contribute to the advancement of the country's economic reality.

10-Lifelong Learning:

Commitment to continuous learning and professional development, keeping abreast of the latest technologies and industry trends. Gain international and industry experience: Participate in international studies and practical training in the fields of oil and gas economics, gaining practical experience and a global perspective in the field of managing economic facilities related to oil and gas.

4. Student Learning Outcomes

The Oil and Gas Economics Technology Department provides clear expectations for what students should know and be able to do upon completion of a course or program. These outcomes ensure that students develop the fundamental skills and knowledge necessary for success in oil and gas economics and technology. The following are some common learning objectives associated with studying oil and gas economics technology:

Outcome 1. Understanding of Core Concepts

Students will demonstrate an understanding of basic economic theories and concepts, including an understanding of how economic theory relates to production, exchange, distribution, and consumption, as well as other economic activities, and an understanding of methods of economic analysis.

Outcome 2. Application of oil and gas economics techniques

Students will be able to apply oil and gas economics techniques based on the foundations of economic theory to analyze global oil and gas markets and formulate public policies for the oil and gas sector.

Outcome 3. Analytical Skills

Students will acquire analytical skills to evaluate oil and gas sector problems and economic problems in general, identify opportunities for improvement, and make decisions based on data and the essence of economic theory.

Outcome 4. Strategic Thinking

Students will demonstrate the ability to think economically, using tools such as economic analysis and econometrics, relying on data from real sources and using modern econometric analysis software.

Outcome 5. Project Management Proficiency

Students will understand the principles of feasibility studies and performance evaluation of economic projects and will be able to make critical decisions in managing economic projects.

Outcome 6. Effective Communication

Students will be able to communicate economic concepts, microeconomic and macroeconomic theories, and related branches of economics clearly and convincingly, both orally and in writing.

Outcome 7. Team Collaboration

Students will demonstrate the ability to work effectively in teams, applying oil and gas economics techniques and related skills to enhance collaboration and individual and collective decision-making in the best interests of oil companies.

Outcome 8. Ethical Decision-Making

Students will understand ethical issues in economic behavior as well as in the marketplace and be able to apply ethical reasoning to make responsible and critical economic decisions..

Outcome 9. Finance and Budgeting Skills

Students will demonstrate the ability to analyze financial data, create financial budgets, and make informed economic and financial decisions that are consistent with the country's economic policy objectives.

5. Academic Staff

Ahmed Fathy Abdel Majeed | Ph.D. in Economics science | professor

Email: ahmed_fathi@ntu.edu.iq

Mobile no: [07740870881](tel:07740870881)

Dina Ahmed Omer | Ph.D. in Economics science | professor

dinaao@ntu.edu.iq

Mobile no: [07710013700](tel:07710013700)

fadwa Ali Hussein | Ph.D. in Economics science | assistant professor

fadwaalabd@ntu.edu.iq

Mobile no: [07700631928](tel:07700631928)

Ahmed Ibrahim Hussein | Phd in Economic | Lecturer

Email: ahmed_ibrahim@ntu.edu.iq

Mobile no.:07719812107

Ahmed Ibrahim Mohamed | Ph.D. in Economics science | Lecturer

Email: ahmed.ibrahim.m@ntu.edu.iq

Mobile no.:07718619880

Mohammed Najeeb Saleh | Master of Economics | Lecturer

Email: muhammed.ns@ntu.edu.iq

Mobile no.:07704123473

6. Credits, Grading and GPA

Credits

(Northern Technical University) is following the Bologna Process with the European Credit Transfer System (ECTS) credit system. The total degree program number of ECTS is 240, 30 ECTS per semester. 1 ECTS is equivalent to 25 hrs student workload, including structured and unstructured workload.

Grading

Before the evaluation, the results are divided into two subgroups: pass and fail. Therefore, the results are independent of the students who failed a course. The grading system is defined as follows:

GRADING SCHEME مخطط الدرجات				
Group	Grade	التقدير	Marks (%)	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب - قيد المعالجة	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note:				
Number Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

Calculation of the Cumulative Grade Point Average (CGPA)

- The CGPA is calculated by the summation of each module score multiplied by its ECTS, all are divided by the program total ECTS.

CGPA of a 4-year B.Sc. degree:

$$CGPA = [(1st \text{ module score} \times ECTS) + (2nd \text{ module score} \times ECTS) +] / 240$$

7. Curriculum/Modules

Semester 1 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
TCMM 105	Principles of Statistics	93	57	6.00	B	Nil
TCMM 106	Principles of Accounting	93	57	6.00	B	Nil
TCMM 107	Principles of Economic	108	92	8.00	C	Nil
OGET 108	Mathematics for Economists	93	57	6.00	C	Nil
NTU 100	Human rights and democracy	32	18	2.00	B	Nil
NTU 101	English Language 1	32	18	2.00	B	Nil

Semester 2 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
NTU 102	Computer 1	62	13	3.00	B	Nil
NTU 103	Arabic Language	32	18	2.00	B	Nil
OGET 109	Microeconomic	108	92	8.00	C	Nil
TCMM 104	Principles of Management	78	72	6.00	B	Nil
OGET 110	International Oil Markets	78	72	6.00	C	Nil
OGET 111	Economic Readings	78	47	5.00	B	Nil

Semester 3 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
OGET 203	Environment of Economic	93	82	7.00	C	Nil
OGET 204	Principles of Marketing	78	72	6.00	S	Nil
OGET 205	Oil Revenue Mangement	108	67	7.00	C	Nil
NTU 200	Crimes of Al-Baath Regime in Iraq	32	18	2.00	B	Nil
NTU 201	English Language 2	32	18	2.00	B	Nil
OGET 206	National Accounts	77	73	6.00	S	Nil

Semester 4 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
OGET 208	Principles of Macroeconomic	108	42	6.00	C	Nil
OGET 209	History of Economic Thought	93	57	6.00	B	Nil
OGET 210	Oil Accounting	78	72	6.00	C	Nil
NTU 202	Computer 2	32	18	2.00	B	Nil
TCMM 212	Summer Training					Nil
OGET 211	Oil and Gas Investment	78	47	5.00	C	Nil
OGET 212	Oil and Gas Management and Marketing	78	47	5.00	C	Nil

Semester 5 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
OGET 301	Economic of Renewable Energies	108	42	6.00	C	Nil
OGET 302	Management Information System	63	37	4.00	S	Nil
OGET 303	Industrial Economy	78	47	5.00	B	Nil
OGET 304	Geography of Oil and Gas	93	32	5.00	C	Nil
OGET 305	International Energy Markets	93	32	5.00	C	Nil
OGET 306	Public Finance	78	47	5.00	C	

Semester 6 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
OGET 307	Mathematical Economics	93	57	150	6.00	Nil
OGET 308	Engineering Economics	78	72	150	6.00	Nil
OGET 309	Monetary Theory	93	7	100	4.00	Nil
OGET 310	Operation Research	77	23	100	4.00	Nil
TCMM 300	Summer Training					
OGET 311	Economic Development	78	47	125	5.00	Nil
OGET 207	Transport Economics	78	47	125	5.00	Nil

Semester 7 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
OGET 401	Econometrics	93	82	175	7.00	Nil
OGET 402	Feasibility Studies and Project Evaluation	78	72	150	6.00	Nil
OGET 403	International Economy	63	62	125	5.00	Nil
NTU 400	Scientific Research Methodology	62	38	100	4.00	Nil
OGET 404	Principles of Commercial Law and Oil Contracts	32	18	50	2.00	Nil
OGET 405	Risk Management	78	72	150	6.00	Nil

Semester 8 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
OGET 406	Applications in Econometrics	78	47	125	5.00	Nil
OGET 407	Financial Markets	78	47	125	5.00	Nil
OGET 408	Graduation Research	77	73	150	6.00	Nil
OGET 409	Sustainable Development	78	72	150	6.00	Nil
OGET 410	Economics of Oil	63	37	100	4.00	Nil
OGET 411	International Oil Policies	63	37	100	4.00	Nil

8. Contact

Program Manager:

Ahmed Fathy Abdel Majeed | Ph.D. in Economics science | professor

Email: ahmed_fathi@ntu.edu.iq

Mobile no: 07740870881

Program Coordinator:

Ahmed Ibrahim Mohamed | Ph.D. in Economics science | Lecturer

Email: ahmed.ibrahim.m@ntu.edu.iq

Mobile no.:07718619880