1. Basic Information

Program Title	All academic programs		
Department offering the Program			
Department Responsible for the Course	Engineering Mathematics and Physics		
Course Code	MUR111		
Year/ Level	Preparatory Year -1st Semester		
Specialization	Minor		
Teaching Hours	Lectures	Tutorial	Practical
	1	2	0

2. Course aims:

No.	aim
1	Use language to demonstrate knowledge of contemporary engineering issues.

3. Learning Outcomes (LOs):

A5.1	Demonstrate knowledge of contemporary engineering topics.
A5.2	Practice research methods with contemporary issues.
A8.1	Communicate verbally with engineering community using English language
A8.2	Communicate effectively in writing with English language.

4. Course Contents:

No.	Topics	Week
1	Technology in use - Materials technology	1, 2
2	Components and assemblies	3, 4
3	Engineering design	5
4	Breaking point (types of technical problems, Assessing faults, repairs and maintenance)	6, 7
5	Technical development (technical requirements, improvements and redesigns)	8, 9
6	Procedures and precautions (health and safety precautions, importance of precautions)	10
8	Monitoring and control (automated systems and measurable parameters)	11
9	Theory and practice (tests and experiments, results and expectations, causes and effects)	12,13
10	Pushing the boundaries (Performance and suitability – capabilities and limitation).	14

5. Teaching and Learning Methods:

No.	Teaching Method
1	Interactive lectures (hybrid learning)
2	Flipped classroom
3	Research assignment

6. Teaching and Learning Methods 0f Disable Students:

No.	Teaching Method
1	Additional Tutorials
2	Online lectures and assignments

7. Student assessment:

7.1 Student Assessment Methods:

No.	Assessment Method	LOs
1	Mid Term Examination (written)	A5.1
2	Semester work (Formative - quizzes – presentation)	A5.1, A5.2, A8.1, A8.2
3	Final Term Examination (written)	A5.1

7.2 Assessment Schedule:

No.	Assessment Method	Weeks
1	Mid Term Examination (written)	7
2	Semester work (Formative - quizzes – presentation)	Every week
3	Final Term Examination (written)	15

7.3 Weighting of Assessments:

No.	Assessment Method	Weights
1	Mid Term Examination (written)	13
2	Semester work (Formative - quizzes – presentation)	13
3	Final Term Examination (written)	67
Total		100%

8. List of References

No.	Reference List
1	***Mark Ibbotson, Cambridge English for Engineering*** *Student's book* free, ***Cambridge press 2011***

9. Facilities Required for Teaching and Learning:

No.	Facility
1	Lecture Classroom
2	White Board
3	Data Show System
4	Visualizer
5	Presenter
6	Sound System

10. Matrix of Knowledge and Skills of the Course:

No.	Topic	aim	LO's
1	Technology in use - Materials technology	1	A5.1
2	Components and assemblies	1	A5.1
3	Engineering design	1	A5.1, A8.1
4	Breaking point (types of technical problems, Assessing faults, repairs and maintenance)	1	A5.1, A8.1
5	Technical development (technical requirements, improvements and redesigns)	1	A5.1, A8.1
6	Procedures and precautions (health and safety precautions, importance of precautions)	1	A5.1, A5.2, A8.1, A8.2
7	Monitoring and control (automated systems and measurable parameters)	1	A5.1, A5.2, A8.1, A8.2
8	Theory and practice (tests and experiments, results and expectations, causes and effects)	1	A5.1, A5.2, A8.1, A8.2
9	Pushing the boundaries (Performance and suitability – capabilities and limitation).	1	A5.1, A5.2, A8.1, A8.2
10	Technology in use - Materials technology	1	A5.1, A5.2, A8.1, A8.2

Course Coordinator: Dr. Hana Mosa

Head of Department: Prof. Mohamed Mohamed El gamal

Course: Technical English language	
Program LOs	**Course LOs**
A5. Practice research techniques and methods of investigation as an inherent part of learning.	A5.1 Demonstrate knowledge of contemporary engineering topics. A5.2 Practice research methods with contemporary engineering issues.
A8. Communicate effectively–graphically, verbally and in writing–with a range of audiences using contemporary tools.	A8.1 Communicate verbally with engineering community using English language. A8.2 Communicate effectively in writing with English language.