



M.Sc. in Sedimentary Petrology and Sedimentation Program Specification





M.Sc. in sedimentation and sedimentary Rocks

A. Basic Information

Program Title:M.Sc. In sedimentary Petrology and SedimentationProgram Type:SingleDepartment:GeologyCoordinator:Prof. Sayed MahfouzAssistant Co-ordinator:Image: Coordinator approval: 14/11/2012

B. Professional Information

1. Program Aims

By the end of the program, graduates must be able to:

- a) provide a knowledge-rich understanding of sedimentation and sedimentary Rocks science and of the work of sedimentation and sedimentary Rocks scientists through research-led teaching..
- b) develop skills in the acquisition, evaluation and use of information.
- c) boost their ability to synthesize innovative ideas and effectively communicate through written, oral and graphical means.
- d) gain updated awareness of ongoing problems in sedimentary rocks and sedimentation processes.

2. Intended Learning Outcomes (ILO's)

2.1 Knowledge and Understanding

By the end of the program, graduates must be able to:

- a.1 dominstrate the scientific study of sedimentation and sedimentary rocks
- a.2 review a robust background about sedimentation and sedimentary Rocks.
- a.3 state the relationships between sedimentation processes, geological aspects and sedimentary rocks.
- a.4 identify The scientific attributes of sedimentation and sedimentary Rocks and their value to society

2.2 Intellectual Skills

By the end of the program, graduates must be able to:





- b.1 plan, design and execute a piece of rigorous research, including the production of a final report, and demonstrate a critical understanding of the appropriate methodology used to characterize sedimentary rocks and sedimentation processes.
- b.2 collect, interpret and combine different types of tools, including using field, technical and laboratory-based methods.
- b.3 develop a substantial range of analytical and observational strategies.
- b.4 formulate logical hypotheses to explain research outcomes with the ability to work toward proving them.

2.3 Skills

2.3.1 Professional and Practical Skills

By the end of the program, graduates must be able to:

- c.1 find and utilise electronic and printed information effectively
- c.2 interpret the various forms of geologic data (maps, logs, satellite images, etc.),
- c.3 identify the different types Applied Geophysics techniques.
- c.4 Communicate effectively in writing and Communicate effectively orally

2.3.2 General Skills

On successful completion of the program the graduate should be able to:

- d.1 Identify individual and collective goals and responsibilities and perform in a manner appropriate to these roles
- d.2 recognise and respect the views and opinions of other team members
- d.3 reflect on individual and group performance and adjust subsequent approaches,
- d.4 make informed / justifiable decisions

3- Academic standards of the program

The Academic Reference Standards (ARS) of this program compile with the Standard Criteria for Postgraduate Programs published by the National Authority of Quality Assurance and Accreditation of Education in (2009). Specific Academic Reference Standards for **M.Sc.** in Goology were approved by the Council of Faculty of Science, Benha University in --/-/2015 (**Appendices 1, 2, 3, 4, 5 and 6**).

4- Reference indices (Benchmarks)

Not applied

5- Curricullum structure and contents of program





a- Program duration: 1-5 years

b- Program structure:

- 15 compulsory credit hours.
- 9 elective credit hours.
- 24 credit hours for the preparation of final thesis.

Program structure	Credit hours
Compulsory courses	15
Elective courses	9
Research and preparing the Ph.D. thesis	24
Total	48

d- Program Courses:

Compulsory courses :

Code	Course Title		No. of hou	ırs
No.	Course The	Lectures	Practical	Credit hours
٦١٠-G	Advanced sedimentary petrology	٣	-	٣
668-G	Paleoecology	٢	-	۲
676-G	Sedimentary-hosted ore deposits	٢	-	۲
665-G	Advanced Stratigraphy (I)	٣	-	٣
663-G	Sedimentation	٣	-	٣
677-G	Sedimentary basin analysis	٢	-	۲
699-G	Master thesis	-	-	24

Elective courses:

Code	Course Title	No. of hours		
No.	Course The	Lectures	Practical	Credit hours
۲۷۸- G	Advanced macro and micropaleontology	3	-	3
۲۲۱ - G	Photogeology and remote sensing	3	-	3
۲۷۲ - G	Lithofacies and stratigrapgy	3	-	3
۲۷۹ - G	Geochemistry of the sedimentary rocks	3	-	3
757 - G	Environmental isotope geology	3	-	3
٦٨٠ - G	Field geology	3	-	3
٦٨١ - G	Clay minerals and soils	3	-	3





777 - G	Advanced structural geology	3	-	3
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6- Contents of the Courses

See course specification (**Appendix 4**)

7- Program admission requirements

1. يشترط لقيد الطالب لدرجة الماجستير في العلوم أن يكون حاصلاً علي درجة البكالوريوس في العلوم في نفس التخصص من كلية العلوم جامعة بنها أو من إحدى كليات العلوم بالجامعات المصرية أو أي درجة معادلة لها من معهد علمي أخر معترف به من المجلس الأعلى للجامعات، وألا يقل تقديره عن جيد// في درجة البكالوريوس بالنسبة للتخصص المنفرد ويجوز قيد الطلاب الحاصلين علي درجة بكالوريوس العلوم في التخصصات المزدوجة بتقدير عام جيد علمي أخر معترف به من المجلس الأعلى في الجامعات، وألا يقل تقديره عن جيد// في درجة البكالوريوس بالنسبة للتخصص المنفرد ويجوز قيد الطلاب الحاصلين علي درجة بكالوريوس العلوم في التخصصات المزدوجة بتقدير عام جيد في درجة البكالوريوس بالنسبة للتخصص المنفرد ويجوز قيد الطلاب الحاصلين علي درجة بكالوريوس العلوم في التخصصات المزدوجة بتقدير عام جيد الكور يوس العلوم في التخصصات المزدوجة بتقدير عام جيد الكور في درجة الكالوريوس ويجوز تحميلهم بساعات من الكود من ٢٠ معاد الموريوس.

٢. يجوز قيد وتسجيل الطالب بدرجة الماجستير من بين الحاصلين على تقدير عام مقبول في درجة البكالوريوس بشرط حصوله على إحدى دبلومات التخصص بتقدير عام (جيد جدا).

٣. لا يتم قبول الطلاب اللذين مر على حصولهم على الدرجة الجامعية الأولى أكثر من خمس سنوات إلا في حالة حصولهم على أحد دبلومات التخصص ونفس الشروط الواردة باللائحة الداخلية للكلية.

٤. يشترط لتسجيل الطالب لدرجة الماجستير في العلوم اجتياز امتحان اتقان اللغة الانجليزية او مايعادلها بمستوي يحدده مجلس الجامعة وكذلك استيفاء أي شروط أضافية تراها الكلية و الجامعة لازمة للقيد والتسجيل للدرجة.

Admission is achieved on the basis of:

- Completion of a B.Sc. degree or any equivalent Arabic or international certificate.
- Passing the TOFEL test with the score determined by the University Council.
- Meeting any additional conditions the college and university deems necessary to register for the M.Sc degree.

8- Regulations for progression and program completion:

 . - أن ينجز الطالب عدد ٢٤ ساعة دراسية معتمدة (١٥ إجبارية و٩ اختيارية) من المقررات الدراسية (كدراسة تمهيدية ومتطلب للتسجيل) لمرحلة ما بعد البكالوريوس بالإضافة إلى





تسجيل عدد ٢٤ ساعة معتمدة للرسالة العلمية خلال فترة الدراسة. ويشترط عدم مرور أكثر من عامين على اجتياز المقررات المطلوبة عند التسجيل لدرجة الماجستير. تعقد امتحانات الدراسة الخاصة بتمهيدي الماجستين في نهاية كل فصل دراسي في المواعيد التي يقرها مجلس الكلية بناء على اقتراح الدراسات العليا ويشترط لنجاح الطالب في المواعيد الدراسية أن يكون حاصلا في كل مقرر على تقدير C على الأقل، ويقدر ٢ نجاح الطالب على النحو المبين بالمادة (٨) مَّن اللائحة. الطالب الذي يرسب في أى مقرر اجباري عليه اعادة دراسة ذلك المقرر والامتحان فيه وفي حالة رسوبه في مقرر اختياري فعليه دراسة ذلك المقرر أو اختيار مقرر أخر بديل له ويدخل تقدير المقرر في كلا حالتي الرسوب والنجاح في حساب المعدل الفصلي أو التر اكمي. ٤. يقوم الطالب بعد نجاحه في المقررات الدراسية بأجراء مناقشه علنية (سيمينار) للخطة البحثية المقترحة على أن يوافق عليها مجلس القسم، وبناء عليه يقوم الطالب بإجراء بحث

- يقره مجلس الجامعة ويقدم الطالب نتائج بحثه في رسالة تقبلها لجنة الحكم، وعلى أن يقوم
- الطالب بعمل سيمينار قبل التقدم بالرسالة بثلاثة اشهر علي الأقل. •. يجوز لمجلس القسم المختص الموافقة على تغيير الشعبة التي درس بها الطالب ونجح في امتحانها إلى شعبة أخرى يرغب في القيد أو التسجيل بها بشرط استيفاؤه لشروط القيد والتسجيل بالشعبة الجديدة وعلي أن يقوم القسم بعمل مقاصة للمقررات التي درسها الطالب وتحميله بالمقررات اللازم استبقائها.
 - According to the bylaws of Benha Faculty of Science the regulations for progression and program completion - the graduate must pass:
 - 15 compulsory credit hours.
 - 9 elective credit hours.
 - 24credit hours for preparing the M.Sc. Thesis.
 - Get 3 computer courses.
 - Give 2 seminars approved by Department Council.
 - Student is considered absent, if he/she misses the final written exam with no acceptable excuse.

9- Methods and rules of evaluation of students in rolled in the program: a- Courses evaluation:

Method of Assessment	Percent
Oral Exam	20%
Final Term Examination	80%
Total	100%





b- Master Thesis evaluation:

- The senior supervisor reports.
- Individual Reports of the Judging Committee (Three specialist professors including the senior supervisor).
- The Public Discussion
- The Common Report of the Judging Committee.
- Department, Faculty and University Boards.

• Assessment and Recommendations:

- -The Judge Committee has to recommend one of the following:
- Accepting the thesis as it is.
- Accepting the thesis and recommends awarding after correction performing.
- Delaying awarding for maximum three months to perform corrections.
- Re-displaying the thesis to the judging committee within limited period.
- Rejecting the thesis at all.

10- Methods of program evaluation:

Samples	Tool
1- Senior Students	Questionnaire
2- Alumni	Questionnaire
3- External Evaluators	Reports
4- Stakeholders	Questionnaire, workshops, seminars, conferences

Head of the Department: Prof. Mohamed A. El-Fakharany Program coordinator: Prof. Sayed Mahfouz

Date: 2015/2016





Petroleum and Hydrogeology M.Sc. Program Specification





Petroleum and Hydrogeology M.Sc. Program Specification

A. Basic Information

Program Title:M.Sc. in Petroleum and HydrogeologyProgram Type:SingleDepartment:GeologyCoordinator:Prof Mohamed El-FakharanyAssistant Co-ordinator:Dr. Mohamed AfifeDates of program specifications approval: 14/11/2012

B. Professional Information

1. Program Aims

By the end of the M.Sc. in Petroleum and Hydrogeology program, graduates must be able to:

- a) envisage the different subjects related to the stat-of-the-art research in petroleum geology and hydrogeology,
- b) apply field and laboratory procedures related to petroleum geology and hydrogeology,
- c) synthesize innovative ideas and effectively communicate them through written, oral and graphical means.
- d) analyze the origin and characteristics of the main sedimentary rock types, sedimentary structures, sedimentary basin analysis, and depositional systems.

2. Intended Learning Outcomes (ILO's)

2.1 Knowledge and Understanding

By the end of the M.Sc. in Petroleum and Hydrogeology program, graduates must be able to:

- a1. assign the essential theoretical bases, procedures and techniques used for petroleum and hydrogeology field studies and related laboratory analyses.
- a2. compile a robust background about the various auxiliary geosciences disciplines necessary to carry out petroleum and hydrogeologic research.
- a3. furnish knowledge about the contained fossils and organic matter in the sedimentary rocks and their use in paleoenvironmental deductions and source rock potential.
- a4. implment recognition of the different types of geochemical, petrophysical, and geophysical methods in petroleum and hydrogeologic research.





2.2 Intellectual Skills

By the end of the M.Sc. in Petroleum and Hydrogeology program, graduates must be able to:

- b1. carry out original research in petroleum and hydrogeology based on field and laboratory observations and analyses,
- b2. generate sound, credible interpretations of field and laboratory observations and data,
- b3. apply gained knowledge and experience to perform specific tasks and solve scientific problems,
- b4. invent logical hypotheses to explain research outcomes with the ability to work toward proving them,

2.3 Skills

2.3.1 Professional and Practical Skills

By the end of the M.Sc. in Petroleum and Hydrogeology program, graduates must be able to:

- c1. collect, read, and examine previous scientific contributions,
- c2. envisage the various forms of geologic data (maps, logs, satellite images, etc.),
- c3. utilize specialized computer software to present and manipulate research data,
- c4. apply various laboratory methodologies pertained to petroleum and hydrological research.

2.3.2 General Skills

By the end of the M.Sc. in Petroleum and Hydrogeology program, graduates must be able to:

- d1. use information and communication technology means in research approaches,
- d2. think independently, set tasks and solve problems on scientific basis,
- d3. integrate with a group; manage time, and positively collaborate and communicate with others,
- d4. acquire self- and long life- learning strategies.

3- Academic standards of the program

The Academic Reference Standards (ARS) of this program compile with the Standard Criteria for Postgraduate Programs published by the National Authority of Quality Assurance and Accreditation of Education in (2009). Specific Academic Reference Standards for M.Sc. in Goology were approved by the Council of Faculty of Science, Benha University in --/--/2015 (Appendices 1, 2, 3, 4, 5 and 6).





4- Reference indices (Benchmarks)

5- Curricullum structure and contents of program

a- Program duration: 2 years

b- Program structure:

- 15 compulsory credit hours.
- 9 elective credit hours.
- 24 credit hours for the preparation of final thesis.
- Total crd hrs. 48

d- Program Courses:

Compulsory courses:

Code	Course Title	No. of hours			
No.	Course The	Lectures	Practical	Credit hours	
601-G	Adanced Hydrogeology (1)	3	-	3	
602-G	Advanced Hydrogeochemistry (1)	3	-	3	
603-G	Hydrogeology of Egypt (1)	2	-	2	
604-G	Advanced Petroleum Geology (1)	3	-	3	
605-G	Reservoir Evaluation and Petroleum Production	2	-	2	
606-G	Well Logging	2	-	2	

Elective courses:

Code	Course Title	No. of hours			
No.	Course The	Lectures	Practical	Credit hours	
607-G	Sedimentation and Sedimentary Basin Analysis	3	-	3	
608-G	Lithofacies and Stratigraphy	3	-	3	
609-G	Biostratigraphy and Paleoenvironment	3	-	3	
610-G	Advanced Sedimentary Petrology	3	-	3	
611-G	Applications of Microfossils in Petroleum Exploration	3	-	3	
612-G	Stratigraphical and Structural Controls of Petroleum	3	-	3	

699-G M.Sc. Thesis 24 credit hours





6- Contents of the Courses

See course specification (Appendix 7 and 8)

7- Program admission requirements

Admission is achieved on the basis of:

- Completion of a B.Sc. degree or any equivalent Arabic or international certificate.
- Passing the TOFEL test with the score determined by the University Council.
- Meeting any additional conditions the college and university deems necessary to register for the M.Sc. degree.

8- Regulations for progression and program completion:

- According to the law of Benha Faculty of Science the regulations for progression and program completion - the graduate must pass:
 - 15 compulsory credit hours.
 - 9 elective credit hours.
 - 24 credit hours for preparing the M.Sc. Thesis.
- 3 computer courses.
- 2 seminars approved by Department Council.
- Student is considered absent, if he/she misses the final written exam with no acceptable excuse.

9- Methods and rules of evaluation of students in rolled in the program:

Courses evaluation:

	Method of Assessment	Percent
1-	Final Oral Exam	20%
2-	Final Term Examination	80%
	Total	100%

Master's Thesis evaluation:

- 5-1. The senior supervisor reports.
- 5-2. Individual Reports of the Judging Committee (Three specialist professors including the senior supervisor).
- 5-3. The Public Discussion
 - 5-4. The Common Report of the Judging Committee.





5-5. Department, Faculty and University Boards.

- Assessment Recommendations:
- -The Judging Committee has to recommend one of the following:
- Accepting the thesis as it is.
- Accepting the thesis and recommends awarding after correction performing.
- Delaying awarding for maximum three months to perform corrections.
- Re-displaying the thesis to the judging committee within limited period.
- Rejecting the thesis at all.

10- Methods of program evaluation:

Samples	ТооІ	
1- Senior Students	Questionnaire	
2- Alumni	Questionnaire	
3- External Evaluators	Reports	
4- Stakeholders	Questionnaire, workshops, seminars, conferences	

Head of the Department: Prof. Mohamed A. El-Fakharany **Program coordinator:** Prof Mohamed El-Fakharany

Date: 2015/2016





Structural Geology and geotectonics MSc. Program Specification





M.Sc. in Structural Geology and geotectonics

A. Basic Information

Program Title:M.Sc. In Structural Geology and geotectonicsProgram Type:SingleDepartment:GeologyCoordinator:Assi.Prof. Wafaa elshahatAssistant Co-ordinator:Jates of program specifications approval: 14/11/2012

B. Professional Information

1. Program Aims

By the end of the program, graduates must be able to:

- a) provide a knowledge-rich understanding of Structural Geology and geotectonics science and of the work of Structural Geology and geotectonics scientists through research-led teaching..
- b) develop skills in the acquisition, evaluation and use of information.
- c) boost their ability to synthesize innovative ideas and effectively communicate through written, oral and graphical means.

2. Intended Learning Outcomes (ILO's)

2.1 Knowledge and Understanding

By the end of the program, graduates must be able to:

- a.1 dominstrate the scientific study of Structural Geology and geotectonics
- a.2 review a robust background about Structural Geology and geotectonics
- a.3 state the relationships between Structural Geology and geotectonics
- a.4 identify The scientific attributes of Structural Geology and geotectonics and their value to society
- a.5 recognize the well-planned and organized methods of collecting, tabulating, representing and indexing data related to Structural Geology and geotectonics .

2.2 Intellectual Skills

By the end of the program, graduates must be able to:





- b.1 plan, design and execute a piece of rigorous research, including the production of a final report, and demonstrate a critical understanding of the appropriate methodology used in Structural Geology and geotectonics
- b.2 collect, interpret and combine different types of tools, including using field, technical and laboratory-based methods.
- b.3 develop a substantial range of analytical and observational strategies.
- b.4 formulate logical hypotheses to explain research outcomes with the ability to work toward proving them.
- b.5 undertake effective fieldwork.

2.3 Skills

2.3.1 Professional and Practical Skills

By the end of the program, graduates must be able to:

- c.1 find and utilise electronic and printed information effectively
- c.2 interpret the various forms of geologic data (maps, logs, satellite images, etc.),
- c.3 identify the different types Applied Geophysics techniques.
- c.4 Communicate effectively in writing and Communicate effectively orally
- c.5 Manage projects

2.3.2 General Skills

On successful completion of the program the graduate should be able to:

- d.1 Identify individual and collective goals and responsibilities and perform in a manner appropriate to these roles
- d.2 recognise and respect the views and opinions of other team members
- d.3 reflect on individual and group performance and adjust subsequent approaches,
- d.4 make informed / justifiable decisions

3- Academic standards of the program

The Academic Reference Standards (ARS) of this program compile with the Standard Criteria for Postgraduate Programs published by the National Authority of Quality Assurance and Accreditation of Education in (2009). Specific Academic Reference Standards for **M.Sc.** in Goology were approved by the Council of Faculty of Science, Benha University in --/-/2015 (**Appendices 1, 2, 3, 4, 5 and 6**).

4- Reference indices (Benchmarks)

Not applied





5- Curricullum structure and contents of program

a- Program duration: 1-5 years

b- Program structure:

- 15 compulsory credit hours.
- 9 elective credit hours.
- 24 credit hours for the preparation of final thesis.

Program structure	Credit hours
Compulsory courses	15
Elective courses	9
Research and preparing the M.Sc. thesis	24
Total	48

d- Program Courses:

Compulsory courses :

Code	Course Title		No. of hou	ırs
No.	Course Thie	Lectures	Practical	Credit hours
٦١3-G	Igneous and metamorphic petrology	٣	-	٣
622-G	Structural Geology	٢	-	۲
629-G	Rock mechanics	٢	-	۲
630-G	Geotectonics	٢	-	۲
631-G	Rock textures	٢	-	۲
632-G	Remote sensing	٢	-	۲
633-G	Sedimentary petrology	۲	-	٢
699-G	M.Sc. dissertation	-	-	٢ ٤

Elective courses:

Code Course Title	Course Title	No. of hours		
No.	Course Title	Lectures	Practical	Credit hours
٦01- G	Advanced hydrogeology (I)	3	-	3
628-G	Mining Geology	3	-	3
634- G	Structural synthesis	3	-	3
635-G	Sedimentary basin analysis	3	-	3





636-G	Introduction to the GIS	3	-	3
637- G	Structural controls on ore bodies	3	-	3
638- G	Advanced geochemistry	3	-	3

6- Contents of the Courses

See course specification (**Appendix 4**)

7- Program admission requirements

1. يشترط لقيد الطالب لدرجة الماجستير في العلوم أن يكون حاصلاً علي درجة البكالوريوس في العلوم في نفس التخصص من كلية العلوم جامعة بنها أو من إحدى كليات العلوم بالجامعات المصرية أو أي درجة معادلة لها من معهد علمي أخر معترف به من المجلس الأعلى للجامعات، وألا يقل تقديره عن جيد// في درجة البكالوريوس بالنسبة للتخصص المنفرد ويجوز قيد الطلاب الحاصلين علي درجة بكالوريوس العلوم في التخصصات المزدوجة بتقدير عام جيد في درجة البكالوريوس وي معند علمي أخر معترف به من المجلس الأعلى في العامعات، وألا يقل تقديره عن جيد// في درجة البكالوريوس بالنسبة للتخصص المنفرد ويجوز قيد الطلاب الحاصلين علي درجة بكالوريوس العلوم في التخصصات المزدوجة بتقدير عام جيد في درجة البكالوريوس ويجوز معند معادلة المالاب الحاصلين علي درجة الكالوريوس العلوم في التخصصات المزدوجة بتقدير عام جيد الكرب الحاصلين علي درجة البكالوريوس العلوم في التخصصات المزدوجة بتقدير عام بيد المالاب الحاصلين علي درجة بكالوريوس العلوم في التخصصات المزدوجة بتقدير عام جيد المالاب الحاصلين علي درجة بكالوريوس العلوم في مادة التخصصات المزدوجة بتقدير عام بيد المالوريوس العلوم في التخصصات المزدوجة بتقدير عام جيد المالاب الحاصلين علي درجة البكالوريوس العلوم في التخصصات المزدوجة بتقدير عام جيد المالاب الحاصلين علي درجة المالوريوس العلوم في التخصصات المزدوجة بتقدير عام جيد المالاب الحاصلين علي درجة البكالوريوس العلوم في مادة التخصص ويجوز تحميلهم بساعات من الكود ٣٠٠ و ٣٠٠ لمرحلة البكالوريوس.

٢. يجوز قيد وتسجيل الطالب بدرجة الماجستير من بين الحاصلين على تقدير عام مقبول في درجة البكالوريوس بشرط حصوله على إحدى دبلومات التخصص بتقدير عام (جيد جدا).

٣. لا يتم قبول الطلاب اللذين مر على حصولهم على الدرجة الجامعية الأولى أكثر من خمس سنوات إلا في حالة حصولهم على أحد دبلومات التخصص ونفس الشروط الواردة باللائحة الداخلية للكلية.

٤. يشترط لتسجيل الطالب لدرجة الماجستير في العلوم اجتياز امتحان اتقان اللغة الانجليزية او مايعادلها بمستوي يحدده مجلس الجامعة وكذلك استيفاء أي شروط أضافية تراها الكلية و الجامعة لازمة للقيد والتسجيل للدرجة.

Admission is achieved on the basis of:

- Completion of a B.Sc. degree or any equivalent Arabic or international certificate.
- Passing the TOFEL test with the score determined by the University Council.
- Meeting any additional conditions the college and university deems necessary to register for the M.Sc degree.

8- Regulations for progression and program completion:

 . - أن ينجز الطالب عدد ٢٤ ساعة دراسية معتمدة (١٥ إجبارية و٩ اختيارية) من المقررات الدراسية (كدراسة تمهيدية ومتطلب للتسجيل) لمرحلة ما بعد البكالوريوس بالإضافة إلي





تسجيل عدد ٢٤ ساعة معتمدة للرسالة العلمية خلال فترة الدراسة. ويشترط عدم مرور أكثر من عامين على اجتياز المقررات المطلوبة عند التسجيل لدرجة الماجستير. تعقد امتحانات الدراسة الخاصة بتمهيدي الماجستين في نهاية كل فصل دراسي في المواعيد التي يقرها مجلس الكلية بناء على اقتراح الدراسات العليا ويشترط لنجاح الطالب في المواعيد الدراسية أن يكون حاصلا في كل مقرر على تقدير C على الأقل، ويقدر ٢ نجاح الطالب على النحو المبين بالمادة (٨) مَّن اللائحة. الطالب الذي يرسب في أى مقرر اجباري عليه اعادة دراسة ذلك المقرر والامتحان فيه وفي حالة رسوبه في مقرر اختياري فعليه دراسة ذلك المقرر أو اختيار مقرر أخر بديل له ويدخل تقدير المقرر في كلا حالتي الرسوب والنجاح في حساب المعدل الفصلي أو التر اكمي. ٤. يقوم الطالب بعد نجاحه في المقررات الدراسية بأجراء مناقشه علنية (سيمينار) للخطة البحثية المقترحة على أن يوافق عليها مجلس القسم، وبناء عليه يقوم الطالب بإجراء بحث

- يقره مجلس الجامعة ويقدم الطالب نتائج بحثه في رسالة تقبلها لجنة الحكم، وعلى أن يقوم
- الطالب بعمل سيمينار قبل التقدم بالرسالة بثلاثة اشهر علي الأقل. •. يجوز لمجلس القسم المختص الموافقة على تغيير الشعبة التي درس بها الطالب ونجح في امتحانها إلى شعبة أخرى يرغب في القيد أو التسجيل بها بشرط استيفاؤه لشروط القيد والتسجيل بالشعبة الجديدة وعلي أن يقوم القسم بعمل مقاصة للمقررات التي درسها الطالب وتحميله بالمقررات اللازم استبقائها.
 - According to the bylaws of Benha Faculty of Science the regulations for progression and program completion - the graduate must pass:
 - 15 compulsory credit hours.
 - 9 elective credit hours.
 - 24credit hours for preparing the M.Sc. Thesis.
 - Get 3 computer courses.
 - Give 2 seminars approved by Department Council.
 - Student is considered absent, if he/she misses the final written exam with no acceptable excuse.

9- Methods and rules of evaluation of students in rolled in the program: a- Courses evaluation:

Method of Assessment	Percent
Oral Exam	20%
Final Term Examination	80%
Total	100%





b- Master Thesis evaluation:

- The senior supervisor reports.
- Individual Reports of the Judging Committee (Three specialist professors including the senior supervisor).
- The Public Discussion
- The Common Report of the Judging Committee.
- Department, Faculty and University Boards.

• Assessment and Recommendations:

- -The Judge Committee has to recommend one of the following:
- Accepting the thesis as it is.
- Accepting the thesis and recommends awarding after correction performing.
- Delaying awarding for maximum three months to perform corrections.
- Re-displaying the thesis to the judging committee within limited period.
- Rejecting the thesis at all.

10- Methods of program evaluation:

Samples	Tool		
1- Senior Students	Questionnaire		
2- Alumni	Questionnaire		
3- External Evaluators	Reports		
4- Stakeholders	Questionnaire, workshops, seminars, conferences		

Head of the Department: Prof. Mohamed A. El-Fakharany Program coordinator: Assi.Prof. Wafaa elshahat

Date: 2015/2016





Applied Geophysics MSc. Program Specification





M.Sc. in Applied Geophysics

A. Basic Information

Program Title:	M.Sc. In Applied Geophysics			
Program Type:	Single			
Department:	Geology			
Coordinator:	Assi.Prof. Wafaa elshahat			
Assistant Co-ordinator:				
Dates of program specifications approval: 14/11/2012				

B. Professional Information

1. Program Aims

By the end of the program, graduates must be able to:

- a) provide a knowledge-rich understanding of Applied Geophysics science and of the work of Applied Geophysics scientists through research-led teaching,
- b) develop skills in the acquisition, evaluation and use of information,
- c) boost graduates' ability to synthesize innovative ideas and effectively communicate through written, oral and graphical means,
- d) promote the group work and effective communication.

2. Intended Learning Outcomes (ILO's)

2.1 Knowledge and Understanding

By the end of the program, graduates must be able to:

- a.1 dominstrate The scientific study of Applied Geophyics
- a.2 review a robust background about the various auxiliary geosciences disciplines necessary to carry out Applied Geophysics.
- a.3 state The relationships between physical and geological aspects.
- a.4 identify The scientific attributes of Applied Geophysics and their value to society

2.2 Intellectual Skills

By the end of the program, graduates must be able to:

b.1 plan, design and execute a piece of rigorous research, including the production of a final report, and demonstrate a critical understanding of the appropriate methodology used in ap-





plied geophysics.

- b.2 collect, interpret and combine different types of geophysical tools, including using technical and laboratory-based methods
- b.3 develop a substantial range of analytical and observational strategies.
- b.4 formulate logical hypotheses to explain research outcomes with the ability to work toward proving them.

2.3 Skills

2.3.1 Professional and Practical Skills

By the end of the program, graduates must be able to:

- c.1 find and utilise electronic and printed information effectively
- c.2 interpret the various forms of geologic data (maps, logs, satellite images, etc.),
- c.3 identify the different types Applied Geophysics techniques.
- c.4 Communicate effectively in writing and Communicate effectively orally

2.3.2 General Skills

On successful completion of the program the graduate should be able to:

- d.1 Identify individual and collective goals and responsibilities and perform in a manner appropriate to these roles
- d.2 recognise and respect the views and opinions of other team members
- d.3 reflect on individual and group performance and adjust subsequent approaches,
- d.4 make informed / justifiable decisions

3- Academic standards of the program

The Academic Reference Standards (ARS) of this program compile with the Standard Criteria for Postgraduate Programs published by the National Authority of Quality Assurance and Accreditation of Education in (2009). Specific Academic Reference Standards for **M.Sc.** in Goology were approved by the Council of Faculty of Science, Benha University in --/-/2015 (**Appendices 1, 2, 3, 4, 5 and 6**).

4- Reference indices (Benchmarks)

Not applied

- 5- Curricullum structure and contents of program
 - a- Program duration: 1-5 years
 - b- Program structure:





- 15 compulsory credit hours.9 elective credit hours.
- 24 credit hours for the preparation of final thesis.

Program structure	Credit hours
Compulsory courses	15
Elective courses	9
Research and preparing the Ph.D. thesis	24
Total	48

d- Program Courses:

Compulsory courses :

Code	le Course Title	No. of hours			
No.		Lectures	Practical	Credit hours	
682-G	Advanced Seismic survey methods	٣	-	٣	
683-G	Advanced Gravity survey methods	٢	-	۲	
684-G	Advanced Magnetic survey methods	٢	-	۲	
685-G	Electric and electromagnetic survey methods	٣	-	٣	
686-G	Advanced Petrophysics	٢	-	۲	
687-G	Advanced Well logging	٣	-	٣	
699-G	Master thesis	-	-	24	

Elective courses:

Code	de Course Title	No. of hours			
No.		Lectures	Practical	Credit hours	
688-G	Radiometric and Geothermal methods	3	-	3	
689-G	Interpretation of Seismic Data	3	-	3	
690-G	Paleomagnetism	3	-	3	
691-G	Advanced Hydrogeology (1)	3	-	3	
692-G	Seismic Stratigraphy	3	-	3	
693-G	Subsurface Geology	3	-	3	
622-G	Sedimentary Rocks	3	-	3	
694-G	Structural Geology	3	-	3	
780-G	Geophysical Data Processing	3	-	3	





6- Contents of the Courses

See course specification (Appendix 7, 8)

7- Program admission requirements

1. يشترط لقيد الطالب لدرجة الماجستير في العلوم أن يكون حاصلاً علي درجة البكالوريوس في العلوم في نفس التخصص من كلية العلوم جامعة بنها أو من إحدى كليات العلوم بالجامعات المصرية أو أي درجة معادلة لها من معهد علمي أخر معترف به من المجلس الأعلى للجامعات، وألا يقل تقديره عن جيد// في درجة البكالوريوس بالنسبة للتخصص المنفرد ويجوز للجامعات، وألا يقل تقديره عن جيد// في درجة البكالوريوس بالنسبة للتخصص المنفرد ويجوز في العلوم بالحامعات، وألا يقل تقديره عن جيد// في درجة البكالوريوس بالنسبة للتخصص المعلس الأعلى في درجة معادلة لها من معهد علمي أخر معترف به من المجلس الأعلى قيد الطلاب الحاصلين علي درجة بكالوريوس العلوم في التخصصات المزدوجة بتقدير عام جيد في درجة البكالوريوس بالنسبة للتخصص المنفرد ويجوز في درجة الحلاب الحاصلين علي درجة بكالوريوس العلوم في التخصصات المزدوجة بتقدير عام جيد أي درجة الكالوريوس ويجوز مع درجة الملاب الحاصلين علي درجة بكالوريوس العلوم في التخصصات المزدوجة بتقدير عام جيد أي درجة الكالوريوس العلوم في التخصص المزدوجة بتقدير عام جيد أي درجة الكالوريوس بالنسبة للتخصص المنفرد ويجوز قيد الطلاب الحاصلين علي درجة بكالوريوس العلوم في التخصصات المزدوجة بتقدير عام جيد أي درجة الكالوريوس العلوم في التخصصات المزدوجة بتقدير عام جيد أي درجة الكالوريوس ويجوز معام جيد أي درجة الكالوريوس من كال معترف به من المزدوجة بتقدير عام جيد أي درجة الكالوريوس ويتوني من كالوريوس ويجوز الكالوريوس ويجوز الكالوريوس الكود معام أي درجة الكالوريوس ويخون معام بياعات من أي درجة البكالوريوس ويخون الكالوريوس الكود المن من معام المزاد معالي مرحلة البكالوريوس الكود معام وي مادة التخصص ويجوز الكود بعام الكود معام وي الكود معالي أي ما يحدون الكود معان الكود الكود الكود الكود الكود الكود الكود ويخون أي درجة الكود ويخون الكود ويخون الكود الكود الكود معام وي ما يودن الكود بعن الكود معان الكود ويخوز الكود ويخوز الكود ويخوز الكود ويخوز الكود بعلي أي ما يحدون الكود معان الكود معان الكود معان الكود معان الكود ويخوز الكود ويخون الكود ويخون الكود ويخوز الكود ويخون الكود ويخ

٢. يجوز قيد وتسجيل الطالب بدرجة الماجستير من بين الحاصلين على تقدير عام مقبول في درجة البكالوريوس بشرط حصوله على إحدى دبلومات التخصص بتقدير عام (جيد جدا).

٣. لا يتم قبول الطلاب اللذين مر على حصولهم على الدرجة الجامعية الأولى أكثر من خمس سنوات إلا في حالة حصولهم على أحد دبلومات التخصص ونفس الشروط الواردة باللائحة الداخلية للكلية.

٤. يشترط لتسجيل الطالب لدرجة الماجستير في العلوم اجتياز امتحان اتقان اللغة الانجليزية او مايعادلها بمستوي يحدده مجلس الجامعة وكذلك استيفاء أي شروط أضافية تراها الكلية و الجامعة لازمة للقيد والتسجيل للدرجة.

Admission is achieved on the basis of:

- Completion of a B.Sc. degree or any equivalent Arabic or international certificate.
- Passing the TOFEL test with the score determined by the University Council.
- Meeting any additional conditions the college and university deems necessary to register for the M.Sc degree.

8- Regulations for progression and program completion:

 أن ينجز الطالب عدد ٢٤ ساعة دراسية معتمدة (١٥ إجبارية و٩ اختيارية) من المقررات الدراسية (كدراسة تمهيدية ومتطلب للتسجيل) لمرحلة ما بعد البكالوريوس بالإضافة إلي تسجيل عدد ٢٤ ساعة معتمدة للرسالة العلمية خلال فترة الدراسة. ويشترط عدم مرور أكثر من عامين على اجتياز المقررات المطلوبة عند التسجيل لدرجة الماجستير.





- ٢. تعقد امتحانات الدراسة الخاصة بتمهيدي الماجستير في نهاية كل فصل دراسي في المواعيد التي يقر ها مجلس الكلية بناء علي اقتراح الدراسات العليا ويشترط لنجاح الطالب في المقررات الدراسية أن يكون حاصلا في كل مقرر على تقدير C على الأقل، ويقدر نجاح الطالب على النحو المبين بالمادة (٨) من اللائحة.
- ٣. الطالب الذي يرسب في أى مقرر اجباري عليه اعادة دراسة ذلك المقرر والامتحان فيه وفي حالة رسوبه في مقرر اختياري فعليه دراسة ذلك المقرر أو اختيار مقرر أخر بديل له ويدخل تقدير المقرر في كلا حالتي الرسوب والنجاح في حساب المعدل الفصلي أو التراكمي.
- ٤. يقوم الطَّالب بعد نجاحه في المقررات الدراسية بأجراء مناقشه علنية (سيمينار) للخطة البحثية المقترحة علي أن يوافق عليها مجلس القسم، وبناء عليه يقوم الطالب بإجراء بحث يقره مجلس الجامعة ويقدم الطالب نتائج بحثه في رسالة تقبلها لجنة الحكم، وعلي أن يقوم الطالب بعمل سيمينار قبل التقدم بالرسالة بثلاثة اشهر علي الأقل.
- يجوز لمجلس القسم المختص الموافقة على تغيير الشعبة آلتي درس بها الطالب ونجح في امتحانها إلى شعبة أخرى يرغب في القيد أو التسجيل بها بشرط استيفاؤه لشروط القيد والتسجيل بالشعبة الجديدة وعلي ان يقوم القسم بعمل مقاصة للمقررات التي درسها الطالب وتحميله بالمقررات اللازم استيفائها.
 - According to the bylaws of Benha Faculty of Science the regulations for progression and program completion - the graduate must pass:
 - 15 compulsory credit hours.
 - 9 elective credit hours.
 - 24credit hours for preparing the M.Sc. Thesis.
 - Get 3 computer courses.
 - Give 2 seminars approved by Department Council.
 - Student is considered absent, if he/she misses the final written exam with no acceptable excuse.

9- Methods and rules of evaluation of students in rolled in the program:

a- Courses evaluation:

Method of Assessment	Percent
Oral Exam	20%
Final Term Examination	80%
Total	100%

b- Master Thesis evaluation:

- The senior supervisor reports.





- Individual Reports of the Judging Committee (Three specialist professors including the senior supervisor).

- The Public Discussion
- The Common Report of the Judging Committee.
- Department, Faculty and University Boards.
- Assessment and Recommendations:
- -The Judge Committee has to recommend one of the following:
- Accepting the thesis as it is.
- Accepting the thesis and recommends awarding after correction performing.
- Delaying awarding for maximum three months to perform corrections.
- Re-displaying the thesis to the judging committee within limited period.
- Rejecting the thesis at all.

10- Methods of program evaluation:

Samples	ΤοοΙ		
1- Senior Students	Questionnaire		
2- Alumni	Questionnaire		
3- External Evaluators	Reports		
4- Stakeholders	Questionnaire, workshops, seminars, conferences		

Head of the Department: Prof. Mohamed A. El-Fakharany Program coordinator: Assi.Prof. Wafaa elshahat

Date: 2015/2016





Mineralogical and petrological M.Sc. Program Specification





Mineralogical and petrological M.Sc. Program Specification

A. Basic Information

Program Title:M.Sc. in Minerals, Rocks and Ore depositsProgram Type:SingleDepartment:GeologyCoordinator:Prof Basem ZoheirAssistant Co-ordinator:Dr. Moustafa MogahedDates of program specifications approval: 14/11/2012

B. Professional Information

1. Program Aims

By the end of the M.Sc. in Mineralogical and petrological program, graduates must be able to:

- a) envisage the different subjects related to the stat-of-the-art research in Mineralogy, Petrology and Ore Geology,
- b) apply field and laboratory procedures related to Mineralogy, Petrology and Ore Geology,
- c) synthesize innovative ideas and effectively communicate them through written, oral and graphical means.
- d) analyze the origin and characteristics of the main magmatic rock types, magmatic structures, magmatic basin analysis, and depositional systems.

2. Intended Learning Outcomes (ILO's)

2.1 Knowledge and Understanding

By the end of the M.Sc. in Minerals, Rocks and Ore deposits program, graduates must be able to:

- a1. assign the essential theoretical bases, procedures and techniques used for mineralogical and petrological field studies and related laboratory analyses,
- a2. compile a robust background about the various auxiliary geosciences disciplines necessary to carry out mineralogical and petrological research,
- a3. demonstrate the contained minerals and crystalline matter in the magmatic rocks and their use, and
- a4. recognize the different types of geochemical, petrophysical, and geophysical methods in mineralogical and petrological research.





2.2 Intellectual Skills

By the end of the M.Sc. in Minerals, Rocks and Ore deposits program, graduates must be able to:

- b1. carry out original research in mineralogical and petrological based on field and laboratory observations and analyses,
- b2. generate sound, credible interpretations of field and laboratory observations and data,
- b3. apply gained knowledge and experience to perform specific tasks and solve scientific problems,
- b4. invent logical hypotheses to explain research outcomes with the ability to work toward proving them,

2.3 Skills

2.3.1 Professional and Practical Skills

By the end of the M.Sc. in Minerals, Rocks and Ore deposits program, graduates must be able to:

- c1. collect, read, and examine previous scientific contributions,
- c2. envisage the various forms of geologic data (maps, logs, satellite images, etc.),
- c3. utilize specialized computer software to present and manipulate research data,
- c4. apply various laboratory methodologies pertained to mineralogical and petrological research.

2.3.2 General Skills

By the end of the M.Sc. in Minerals, Rocks and Ore deposits program, graduates must be able to:

- d1. use information and communication technology means in research approaches,
- d2. think independently, set tasks and solve problems on scientific basis,
- d3. integrate with a group; manage time, and positively collaborate and communicate with others,
- d4. acquire self- and long life- learning strategies.

3- Academic standards of the program

The Academic Reference Standards (ARS) of this program compile with the Standard Criteria for Postgraduate Programs published by the National Authority of Quality Assurance and Accreditation of Education in (2009). Specific Academic Reference Standards for M.Sc. in Goology were approved by the Council of Faculty of Science, Benha University in --/--/2015 (Appendices 1, 2, 3, 4, 5 and 6).





4- Reference indices (Benchmarks)

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5- Curricullum structure and contents of program

a- Program duration: 2 years

b- Program structure:

- 15 compulsory credit hours.
- 9 elective credit hours.
- 24 credit hours for the preparation of final thesis.
- Total crd hrs. 48

d- Program Courses:

Compulsory courses:

Code Course Title	Course Title	No. of hours			
	Lectures	Practical	Credit hours		
613-G	Igneous and metamorphic petrology	3	-	3	
614-G	Advanced Mineralogy	2	-	2	
615-G	Advanced Geochemistry	2	-	2	
616-G	Genesis of Ore deposits	3	-	3	
617-G	Mineralized rocks	3	-	3	
618-G	Mineralogy and the Environment	2	-	2	

Elective courses:

Code No.	Course Title	No. of hours			
	Course Thie	Lectures	Practical	Credit hours	
610-G	Advanced sedimentary petrology	3	-	3	
619-G	Clay mineralogy	3	-	3	
620-G	Remote sensing and GIS	3	-	3	
621-G	Isotope Geology	3	-	3	
622-G	Structural Geology	3	-	3	
623-G	Industrial minerals	3	-	3	

699-G M.Sc. Thesis 24 credit hours





6- Contents of the Courses

See course specification (Appendix 7 and 8)

7- Program admission requirements

Admission is achieved on the basis of:

- Completion of a B.Sc. degree or any equivalent Arabic or international certificate.
- Passing the TOFEL test with the score determined by the University Council.
- Meeting any additional conditions the college and university deems necessary to register for the M.Sc. degree.

8- Regulations for progression and program completion:

- According to the law of Benha Faculty of Science the regulations for progression and program completion - the graduate must pass:
 - 15 compulsory credit hours.
 - 9 elective credit hours.
 - 24 credit hours for preparing the M.Sc. Thesis.
- 3 computer courses.
- 2 seminars approved by Department Council.
- Student is considered absent, if he/she misses the final written exam with no acceptable excuse.

9- Methods and rules of evaluation of students in rolled in the program:

Courses evaluation:

Method of Assessment		Percent	
1-	Final Oral Exam	20%	
2-	Final Term Examination	80%	
	Total	100%	

Master's Thesis evaluation:

- 5-1. The senior supervisor reports.
- 5-2. Individual Reports of the Judging Committee (Three specialist professors including the senior supervisor).
- 5-3. The Public Discussion
 - 5-4. The Common Report of the Judging Committee.





5-5. Department, Faculty and University Boards.

- Assessment Recommendations:
- -The Judging Committee has to recommend one of the following:
- Accepting the thesis as it is.
- Accepting the thesis and recommends awarding after correction performing.
- Delaying awarding for maximum three months to perform corrections.
- Re-displaying the thesis to the judging committee within limited period.
- Rejecting the thesis at all.

10- Methods of program evaluation:

Samples	ΤοοΙ
1- Senior Students	Questionnaire
2- Alumni	Questionnaire
3- External Evaluators	Reports
4- Stakeholders	Questionnaire, workshops, seminars, conferences

Head of the Department: Prof. Mohamed A. El-Fakharany **Program coordinator:** Prof Basem Zoheir

Date: 2015/2016





Petroleum and Hydrogeology M.Sc. Program Specification





Petroleum and Hydrogeology M.Sc. Program Specification

A. Basic Information

Program Title:M.Sc. in Petroleum and HydrogeologyProgram Type:SingleDepartment:GeologyCoordinator:Prof Mohamed El-FakharanyAssistant Co-ordinator:Dr. Mohamed AfifeDates of program specifications approval: 14/11/2012

B. Professional Information

1. Program Aims

By the end of the M.Sc. in Petroleum and Hydrogeology program, graduates must be able to:

- a) envisage the different subjects related to the stat-of-the-art research in petroleum geology and hydrogeology,
- b) apply field and laboratory procedures related to petroleum geology and hydrogeology,
- c) synthesize innovative ideas and effectively communicate them through written, oral and graphical means.
- d) analyze the origin and characteristics of the main sedimentary rock types, sedimentary structures, sedimentary basin analysis, and depositional systems.

2. Intended Learning Outcomes (ILO's)

2.1 Knowledge and Understanding

By the end of the M.Sc. in Petroleum and Hydrogeology program, graduates must be able to:

- a1. assign the essential theoretical bases, procedures and techniques used for petroleum and hydrogeology field studies and related laboratory analyses.
- a2. compile a robust background about the various auxiliary geosciences disciplines necessary to carry out petroleum and hydrogeologic research.
- a3. furnish knowledge about the contained fossils and organic matter in the sedimentary rocks and their use in paleoenvironmental deductions and source rock potential.
- a4. implment recognition of the different types of geochemical, petrophysical, and geophysical methods in petroleum and hydrogeologic research.





2.2 Intellectual Skills

By the end of the M.Sc. in Petroleum and Hydrogeology program, graduates must be able to:

- b1. carry out original research in petroleum and hydrogeology based on field and laboratory observations and analyses,
- b2. generate sound, credible interpretations of field and laboratory observations and data,
- b3. apply gained knowledge and experience to perform specific tasks and solve scientific problems,
- b4. invent logical hypotheses to explain research outcomes with the ability to work toward proving them,

2.3 Skills

2.3.1 Professional and Practical Skills

By the end of the M.Sc. in Petroleum and Hydrogeology program, graduates must be able to:

- c1. collect, read, and examine previous scientific contributions,
- c2. envisage the various forms of geologic data (maps, logs, satellite images, etc.),
- c3. utilize specialized computer software to present and manipulate research data,
- c4. apply various laboratory methodologies pertained to petroleum and hydrological research.

2.3.2 General Skills

By the end of the M.Sc. in Petroleum and Hydrogeology program, graduates must be able to:

- d1. use information and communication technology means in research approaches,
- d2. think independently, set tasks and solve problems on scientific basis,
- d3. integrate with a group; manage time, and positively collaborate and communicate with others,
- d4. acquire self- and long life- learning strategies.

3- Academic standards of the program

The Academic Reference Standards (ARS) of this program compile with the Standard Criteria for Postgraduate Programs published by the National Authority of Quality Assurance and Accreditation of Education in (2009). Specific Academic Reference Standards for M.Sc. in Goology were approved by the Council of Faculty of Science, Benha University in --/--/2015 (Appendices 1, 2, 3, 4, 5 and 6).





4- Reference indices (Benchmarks)

5- Curricullum structure and contents of program

a- Program duration: 2 years

b- Program structure:

- 15 compulsory credit hours.
- 9 elective credit hours.
- 24 credit hours for the preparation of final thesis.
- Total crd hrs. 48

d- Program Courses:

Compulsory courses:

Code	Course Title	No. of hours		
No.	Lectures	Practical	Credit hours	
601-G	Adanced Hydrogeology (1)	3	-	3
602-G	Advanced Hydrogeochemistry (1)	3	-	3
603-G	Hydrogeology of Egypt (1)	2	-	2
604-G	Advanced Petroleum Geology (1)	3	-	3
605-G	Reservoir Evaluation and Petroleum Production	2	-	2
606-G	Well Logging	2	-	2

Elective courses:

Code	Course Title	No. of hours		
No.	Course The	Lectures	Practical	Credit hours
607-G	Sedimentation and Sedimentary Basin Analysis	3	-	3
608-G	Lithofacies and Stratigraphy	3	-	3
609-G	Biostratigraphy and Paleoenvironment	3	-	3
610-G	Advanced Sedimentary Petrology	3	-	3
611-G	Applications of Microfossils in Petroleum Exploration	3	-	3
612-G	Stratigraphical and Structural Controls of Petroleum	3	-	3

699-G M.Sc. Thesis 24 credit hours





6- Contents of the Courses

See course specification (Appendix 7 and 8)

7- Program admission requirements

Admission is achieved on the basis of:

- Completion of a B.Sc. degree or any equivalent Arabic or international certificate.
- Passing the TOFEL test with the score determined by the University Council.
- Meeting any additional conditions the college and university deems necessary to register for the M.Sc. degree.

8- Regulations for progression and program completion:

- According to the law of Benha Faculty of Science the regulations for progression and program completion - the graduate must pass:
 - 15 compulsory credit hours.
 - 9 elective credit hours.
 - 24 credit hours for preparing the M.Sc. Thesis.
- 3 computer courses.
- 2 seminars approved by Department Council.
- Student is considered absent, if he/she misses the final written exam with no acceptable excuse.

9- Methods and rules of evaluation of students in rolled in the program:

Courses evaluation:

	Method of Assessment	Percent
1-	Final Oral Exam	20%
2-	Final Term Examination	80%
	Total	100%

Master's Thesis evaluation:

- 5-1. The senior supervisor reports.
- 5-2. Individual Reports of the Judging Committee (Three specialist professors including the senior supervisor).
- 5-3. The Public Discussion
 - 5-4. The Common Report of the Judging Committee.





5-5. Department, Faculty and University Boards.

- Assessment Recommendations:
- -The Judging Committee has to recommend one of the following:
- Accepting the thesis as it is.
- Accepting the thesis and recommends awarding after correction performing.
- Delaying awarding for maximum three months to perform corrections.
- Re-displaying the thesis to the judging committee within limited period.
- Rejecting the thesis at all.

10- Methods of program evaluation:

Samples	ΤοοΙ
1- Senior Students	Questionnaire
2- Alumni	Questionnaire
3- External Evaluators	Reports
4- Stakeholders	Questionnaire, workshops, seminars, conferences

Head of the Department: Prof. Mohamed A. El-Fakharany **Program coordinator:** Prof Mohamed El-Fakharany

Date: 2015/2016