# Prospectus

2019-2020



# Department of Mathematics

# College of Science

# Jouf University

# Kingdom of Saudi Arabia
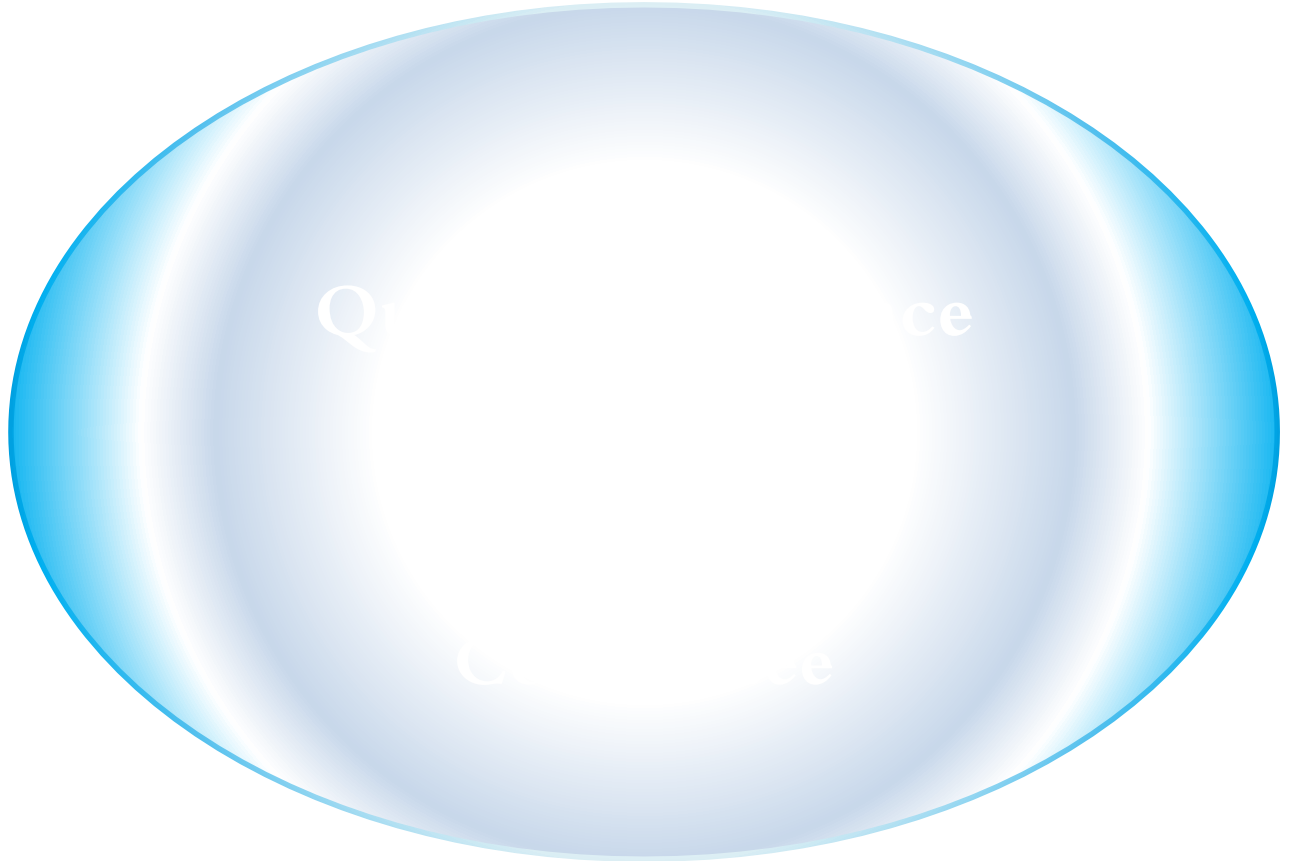
# Department of Mathematics

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# Jouf University

# Preamble

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## Prospectus
## Department of Mathematics
## College of science, Jouf University.

## 1. Introduction

The Department of Mathematics is one of the departments of the College of Science. The Department of mathematics was established in 1423 H (2002), since then, it has grown both in reputation and stature, upholding the traditions, mission and vision of the College and the intake of male and female students has been incresed in most of the university's colleges where mathematics is the language of all applied sciences. The department includes about (26) members and faculty members of various scientific ranks (professor, associate professor and assistant professor) and they are assisted by about (40) lecturers, teaching assistants Lecturers , there are many disciplines such as analysis, algebra, engineering - topology, numerical analysis and applied mathematics. The student gets a bachelor's degree in science with a mathematics specialization if he successfully passes 134 units of study Program, with a GPA of (2.0) out of (5) as the minimum requirement.

## 2. Mission and Vision:

The department of mathematics aspires to be a leader at the local, regional and international levels in the educational and research fields.

This is achieved through contributing to studying problems by conducting Socio-scientific research/workshops to find appropriate solution.

## 3. Message

The Department of Mathematics provides services to the Entire University for undergraduate and postgraduate courses of various faculties of sciences, Computer science, engineerings, Medicine, Pharmacy and applied medical sciences.The aim is to

pursue excellence through teaching and by carrying out scientific research and projects. The Department convey a Strong message to provide high-quality academic programs and scientific research and their development to serve the issues of society while preserving our Islamic values.

## 4. Aims & Objectives.

1- Adopting and developing distinguished academic programs.
2- Department association with the corresponding departments in Saudi and regional universities.
3- Encouraging the students to prepare appropriately for postgraduate studies and scientific research.
4- Preparing a generation capable of serving society.

## 5. Graduate Specefications and Objectives

1- A graduate must possesses sufficient knowledge in the various branches of mathematics.
2- A graduate must be skillfull of scientific and logical thinking to solve problems.
3- A graduate must be Fluent and user friendly in modern technology and its applications in working life.
4- A Graduate must be able to continue graduate studies in mathematics.
5- A graduate must interact with colleagues within other educational and professional institutions.
6- A graduate must be strong enough to take responsibility and serve the community.
7- A graduate must be committed to Islamic, ethical and professional values.

## 6. Methodology.

1- For the Department of Mathematics specialization, the student's average in the general preparation (second level) should not be less than 2.5 out of 5

(a) -The student's gradation shall be based on the courses he successfully passed within the approved study plan of the Department of Mathematics.

(b) -The student continues his academic achievement according to the approved study plan, and he is a candidate for graduation if he fulfills it, graduation requirements for passing 134 academic units, and the cumulative GPA

(2) Out of (5).

3 -Course plans for eight semesters has been designed, including the first semester of general preparation.

4-The academic year is divided into two semesters, and there is a possibility of summer term program , with is a period of half of the semester, and graduation requirements for the degree will be distributed to eight levels according to the study plan.

5-An Academic Advisor has been associated with each students to guide them in their affair related to the study plans (choosing the courses, registering for their courses and other affairs ).

6- The student must adhere to attend the lectures from the first day of the start of semester as in the academic calendar of the university.

7-The student is denied entry to the final examination if his absence in the total Lectures and scientific lessons exceeds 25% without any excuse.

8- Registration, deletion and addition of courses are within the levels of the approved study plan to ensure that students register for the minimum academic hours.

9-The student is allowed to register the courses he deires to study or delete the course according to the following

(a) – The student can register to the courses he wishes to study , in one week before the start of the semester and can withdraw from the study program at the end of the first week of the semester.

(b)- The student can delete courses that he does not wish to study according to the period specified in the university calendar.

(c)- The registration must not exceed the upper limit of the academic hours and not less than the minimum academic hours of the program.

10-The academic load is the total number of hours (study units) for the decisions the student records in the semester and is determined according to the following rules:

(a) – The minimum academic load is 12 credit hours per semester and one academic hour in the summer term program.

(b) – The maximum academic load is 18 credit hours in the semester and 13 credit hours in the summer semester.

(c) – A student who is academicly warned has no right to increase his academic load for more than 12 hours.

(d) – The student with an acceptable grade does not have the right to increase his academic load for more than 14 hours.

(e) – The graduate student is allowed to exceed the upper limit by no more than three credit hours.

11- The student is given an academic warning if his GPA is less than 2 out of 5.

12 -The student may apologize for continuing to study a semester without preparing a failure if he completes the apology procedures in the regular period, and the apology classes should not exceed two consecutive semesters or three separate semesters throughout the student's university study and his enrollment will then be folded.

13-The student may withdraw from one or more courses within eight weeks from the start of the study and four weeks for the summer semester, provided that the academic load is not less than the minimum.

14 - The student may apply to postpone the study before the beginning of the semester, provided that the postponement period does not exceed two consecutive semesters or three non-consecutive semesters as a maximum.

15 - The student graduates after successfully completing the graduation requirements according to the study plan, provided that his grade point average is not less than acceptable (i.e. his cumulative average is not less than 2 out of 5).

16 - The student is warned if his GPA is less than 2 out of 5 and this appears in his academic record, and if the student gets three consecutive warnings, he is considered non fit for academic.

17- The grade for the course quarterly is 40% of the final grade.

18 - The grade of the quarterly works is calculated by two written tests, according to the nature of the course.

19- The grades obtained by the student in each course are calculated as follows:

| المدلول بالإنجليزية | المدلول بالعربية | النقاط | حدود الدرجة | الرمز بالإنجليزية | الرمز بالعربية |
|---|---|---|---|---|---|
| Exceptional | ممتاز مرتفع | ٥٠٠ | ٩٥ – ١٠٠ | A+ | أ+ |
| Excellent | ممتاز | ٤٫٧٥ | ٩٠ أقل ٩٥ | A | أ |
| Superior | جيد جدا مرتفع | ٤٫٥٠ | ٨٥ أقل من ٩٠ | B+ | ب+ |
| Very Good | جيد جدا | ٤٫٠٠ | ٨٠ أقل من ٨٥ | B | ب |
| Above Average | جيد مرتفع | ٣٫٥٠ | ٧٥ أقل من ٨٠ | C+ | ج+ |
| Good | جيد | ٣٫٠٠ | ٧٠ أقل من ٧٥ | C | ج |
| High Pass | مقبول مرتفع | ٢٫٥٠ | ٦٥ أقل من ٧٠ | D+ | د+ |
| Pass | مقبول | ٢٫٠٠ | ٦٠ أقل من ٦٥ | D | د |
| Fail | راسب | ١٫٠٠ | أقل من ٦٠ | F | هـ |
| In-Progress | مستمر | – | – – – – – | IP | م |
| In-Complete | غير مكتمل | – | – – – – – | IC | ل |
| Denile | محروم | ١٫٠٠ | – – – – – | DN | ح |
| Nograde-Pass | ناجح دون درجة | – | ٦٠ وأكثر | NP | ند |
| Nograde-Fail | راسب دون درجة | – | أقل من ٦٠ | NF | هد |
| Withdrawn | منسحب بعذر | – | – – – – – | W | ع |

## 7-Definitions

Academic Year: Two main semesters and possible of one summer term program.

The academic term: a semester of duration not less than fifteen weeks excluding registration periods and final exams, in which courses are taught.

summer term program: A duration that does not exceed eight weeks excluding registration periods and final exams The period for each course is doubled.

**Academic level:** It is an academic stage, and the number of levels required for graduation is eight levels or more according to the approved study plans.

**course:** A course that follows a specific level within the approved study plan in the mathematics program, and for each decision number, symbol, name and detailed description of its vocabulary distinguishes it in terms of content and level from the other courses, and some of the decisions have previous or concurrent requirements.

**The unit of study:** A weekly theoretical lecture that is no less than fifty minutes, or a practical lesson that is no less than one hundred minutes.

**Academic Warning:** A notice given to a student because his cumulative average is below the minimum required.

**Class of quarterly work:** The degree awarded for work that shows student achievement during a semester of exams, research and educational activities during to the education program.

**Final Exam:** A scheduled exam, held once at the end of the semester.

**The final exam score:** The score that the student obtains in each course in the final exam for the semester.

**Final grade:** The sum of the semester scores plus the final test score for each course.

**Estimate:** A description of the percentage or alphabet of the final grade obtained by the student in any course.

**Quarterly Average:** The quotient divided by the total points obtained by the student by the total number of units determined for all courses that he studied in any semester, points are calculated by multiplying the unit determined by the weight of the estimate obtained by every student who has studied, see Appendix B.

**GPA: The quotient divided by the total points obtained by the student in all the courses he studied since his enrollment at the university on the total units determined for these courses, see**

**Appendix B.**

**General Estimate: A description of the student's educational attainment level during the period of his studies at the university.**

**Minimum academic load: the minimum number of credits that should be on the student registered it in proportion to its cumulative average.**

## 8.Admission of new students

**Guidelines based on the department councils and college council for the admission of a new student to the college of science and the department of mathematics requires the following:**

**(a)- The applicant must have received a general high school diploma in natural sciences or equivalent with an average no lower than 'Good'. From inside or outside the kingdom in addition to the measurement tests (qualifications + achievement).**

**(b)- The applicant has not passed his secondary school diploma or equivalent for a period of more than five years and the director of the university may exempt from this condition if convincing reasons are available.**

**(c)- The applicant must posseses good character and behavior.**

(d)- The Applicant must be medically fit.

(e)- The applicant must obtain approval letter from his study reference if he works in any governmental or private authority.

(f)- He meets any other conditions specified by the University Council and announced at the time of application. -

(g)- The Applicant must not to be dismissed from another university for disciplinary reasons.

(h)- It is not permissible to accept those holding a bachelor's degree, or its equivalent for another baccalaureate, and the university director may exclude from that.

(i)- A student who is registered for another university degree or below may not be accepted, whether in the same university or elsewhere.

## 9. Teaching Structure

The Executive Rule of the Department of Mathematics at Jouf University:

1 - The college specializes in academic guidance for every student who helps him in matters related to the study system and his academic career, such as choosing specialization and registering compulsory and elective courses and other academic matters.

2 - The student is responsible for knowing and following up the study system and the regulations regulating it, including graduation requirements.

3 -The minimum specialization in the Department of Mathematics is that its average in general preparation (first level) be not less than 2.5 out of 5.3- The student is enrolled in the study according to the following- :

(a) - The student's gradation shall be in accordance with the courses he successfully passed within the approved study plan for the Department of Mathematics, see Appendix C.

(b) - The student continues his academic achievement according to the approved study plan and is a candidate for graduation, as he fulfills the requirements for graduation in passing 134 academic units.

4. Study plans are designed to equate with eight semesters, covering 134 study units.

5. The academic system in which the academic year is divided into two main semesters, and there may be a summer semester, provided that its duration is calculated by half of the main semester period, and the graduation requirements for obtaining the academic degree are distributed to levels according to the study plan.

6. The student must adhere to attend the lectures from the first day of study, as in the academic calendar of the university .

## 10. Rules for registration, deletion and addition of courses

1- Registration, deletion and addition of courses are within the levels of the approved study plan in a way that guarantees student registration for the minimum academic load.

2-The student is allowed to register the courses he wishes to study or delete according to the following:

A - The student can register the courses he wishes to study one week before the start of the semester and end at the end of the week the first of it.

B - The student can delete courses that he does not wish to study according to the period specified in the university calendar.

C - The registration must not exceed the upper limit of the academic load and not less than the minimum.

3-The student registration process is done after consulting his academic advisor, and the student is responsible for any shortcomings errors occur as a result of ignorance of instructions.

4- If the student does not register any course during the regular registration period, he will be discontinued from study.

5- Approving the registration:

A- In the case of automatic enrollment, the student must adopt his academic schedule through his personal file in the university system computer during the period of deletion and addition.

B - The student is considered suspended from the study, and the phrase "discontinued for non-registration" will be placed in the computer system if he does not

Adopting his academic schedule during the period of deletion and addition.

6-The academic load is the sum of the hours (units) of the courses the student records in the semester it is determined according to the following rules:

A- The minimum academic load is 12 credit hours per semester and one academic hour per summer season.

B - The maximum academic load is 18 credit hours per semester and 13 credit hours per semester summer time.

C- A student who is academicly warned has no right to increase his academic load for more than 12 hours.

D - The student with an acceptable grade does not have the right to increase his academic load for more than 14 hours.

E - The graduate student is allowed to exceed the upper limit by no more than three credit hours.

7- The student is given an academic warning if his GPA is less than 2 out of 5.

## 11. Perseverance and excuse from the study

Rules for denying entry to the final exam:

1-The student is denied entry to the final examination of the course if his absence exceeds 25% without an excuse from the total lectures and scientific lessons specified for the course.

2- The student who was deprived of taking the exam due to absence is considered to have failed in the course, and the quarterly degree of implementation is established for him and a disadvantaged estimate (H) is monitored.

3-The deprivation lists are announced in the last week of study for each semester by the college itself.

4- It is permissible to exclude the deprivation and allow the student to take the exam, provided that the student presents an excuse, and the university council determines the attendance rate, provided that it does not exceed 50% of the lectures and practical lessons specified for the course.

Rules of absence from the final examination:

1-A student who is absent from the final exam will have a zero score in that test, and his grade in that course will be calculated on the basis of the grades of the quarterly work that he obtained.

2-The excuse is absent from the final exam in the following cases:

A- To present the excuse at the time of the cause until the week before its removal on the department to which the student belongs.

B- Compulsive excuses accepted by the College Council.

3- The alternative test and monitoring of the result will be within a period not exceeding the end of the next academic semester.

Apology rules for studying:

1- A student may apologize for continuing to study a semester without preparing a semester if he completes the apology procedures in the regular period, which extends three weeks before the final exams, according to the university calendar.

2- The student is given a grade of (P) or (W), and this semester is calculated from the period required to complete the graduation requirements

3- The apology classes must not exceed two consecutive semesters or three separate semesters throughout the student's university studies and his enrollment will then be folded.

4- An apology student must register after the apology period has ended, otherwise it will be considered a discontinuation.

5- A student may withdraw from one or more courses within eight weeks from the start of study and four weeks for the summer semester, provided that the academic load is not less than the minimum.

## 12. Postponement and drop out

1- The student may apply to postpone the study before the beginning of the semester, provided that the postponement period does not exceed two consecutive semesters or three non-consecutive semesters as a maximum, then his enrollment will be folded thereafter, and the University Council may, in case of necessity, exclude from this after the recommendation of the College Council and Student Affairs.

2- The female student accompanying her husband or who is legally dependent on the scholarship may suspend her studies (acceptance and registration) for a period not exceeding five years. In the case of the student's desire to return to study, her situation is treated as follows:

A- In the event that the study plans change, equivalent or equivalent courses that the student or student previously studied and complete the graduation requirements for the current plan.

B- In the event that the study plans do not change, the student returns to her previous academic position.

C- After more than five years have passed, the student's seat will be kept in the department and begin as a new student.

3- The postponement period is not counted within the period required to complete the graduation requirements.

4- The deferred student must register after the delay period has ended, otherwise it will be considered discontinued.

5- The student's registration will be folded due to "discontinuance of registration" if he does not remedy his academic position before the end of the fifth week of study.

6- The student is not considered as dropping out of study for the classes he studies as a visitor at another university

## 13. Re-enrollment

1- A student whose registration is folded can apply to his college by requesting Re-enrollment with his previous number and record according to the following controls:

A- To submit an application for re-enrollment within four semesters from the date of registration enrollment.

B - That the relevant college council agree to re-enroll the student in accordance with the regulations that he determines during the registration time period and in the event that the approval of the college council is later than the regular period of registration, the student is not entitled to register except in the next semester.

C - If the student has been enrolled for four semesters or more, he can apply to the university as a new student without referring to his previous academic record, provided that all the conditions of admission announced at the time apply, and the University Council may exclude from that based on the recommendation of the College Council.

D - It is not permissible to re-enroll the student more than once, and the University Council, in case of necessity, is exempt from that, based on the recommendation of the College Council.

E- It is not permissible to re-enroll the student whose registration has been closed if he is academic separated.

2- It is not permissible to re-enroll the student who was dismissed from the university for educational or disciplinary reasons, or who was dismissed from another university for disciplinary reasons.

## 14 .Graduation

1-The student graduates after successfully completing the graduation requirements according to the study plan, provided that his grade point average is not less than acceptable, (i.e. his cumulative average is not less than 2 out of 5), and the college council or whoever he delegates, based on the recommendation of the relevant department council, specify appropriate courses that the student studies to raise GPA if he succeeds in the courses and fails in the GPA.

2- The student is not considered a graduate unless the university council approves that he be awarded the academic degree.

3 -Graduation document:

A- Every graduate shall be granted a graduation document in which he clarifies in both Arabic and English languages the date of graduation in the Hijri and Gregorian years, the name of the student quadruple, his nationality, civil registry number, college, specialization, degree, grade point average, grade, and expectation of the document and stamped from the Dean of Admission Registration.

B- A document can be issued that comes out as a lost or damaged allowance and the phrase "lost or lost allowance" or "damaged allowance"

## 15. Dismissal from the university

1 -The student is warned if his GPA is less than 2 out of 5, and that appears in his academic record.

2 -If the student gets three consecutive warnings, he will be considered an academic student until the college council's decision is issued in the following manner:

The College Council gives the male or female student a fourth chance, and if the student's performance improves in the last semester so that his semester average is no less than 3 out of 5, the College Board recommends on it to the University Council to give him one last chance.

3 -If the student does not fulfill the graduation requirements within the period prescribed for his graduation, his status will be treated according to the following:

If he does not complete the graduation requirements within a period not exceeding half of the period prescribed for his graduation in addition to the duration of the program, the College Council may give an exceptional opportunity for the student to complete the graduation requirements with a maximum of no more than twice the original period specified for graduation, provided that the reason for failure is acceptable to the College Board.

4- The college shall list all the cases it receives and present it to the relevant councils, and inform the Deanship of Admission and Registration of decisions within a period not exceeding one week from the start of the study, and in the

**event of delaying that, the student is not entitled to register except in the next semester.**

## 16. Final exams

1 - The degree of quarterly work for the theoretical course is 40% and for the theoretical course which includes a practical course 50% of the final degree.

2 -The grade of the semester works is calculated by practical tests or research or two written tests according to the nature of the course.

3 -The grades obtained by the student in each course are calculated as follows:

| The percentage degree | Appreciation | Appreciation code | Weight Appreciation form: 5 |
|---|---|---|---|
| 95-100 | Exceptional | A+ | 5.00 |
| 90 less than 95 | Excellent | A | 4.75 |
| 85less than 90 | Superior | B+ | 4.50 |
| 80 less than 85 | Very Good | B | 4.00 |
| 75 lees than 80 | Above Aversge | C+ | 3.50 |
| 70less than 75 | Good | C | 3.00 |
| 65 less than70 | High pass | D+ | 2.50 |
| 60 less than 65 | pass | D | 2.00 |
| Less than 60 | Fail | F | 1.00 |

4 -An estimate (withdrawing from the performance of illness) is given when the official student withdraws from all courses after a period withdrawing with an excuse, and appreciation is given after the course instructor approves that the student's performance was satisfactory, and that his absence without excuse did not exceed 20% of the lectures and laboratories until the date of its withdrawal, and this estimate does not affect the rate

The student's cumulative.

5 -An estimate (withdrawn with a grade of deposit) (p) is given if the student formally withdraws from all courses after a period   Withdrawal with an excuse and his performance was satisfactory, and the student who obtained this estimate is considered to have failed in the course.

6 -The general grade point average for a student's graduation is based on his grade point average based on the weight of the grade of  (5), the general assessment of the cumulative average when a student graduates based on his cumulative average is as follows:

1- (Excellent) if the GPA is not less than 4.5 out of 5

2-(Very Good) if the GPA is from 3.75 to less than 4.5 out of 5

(Good) if the GPA is from 2.75 to less than 3.75 from 5

(Acceptable) if the GPA is from 2.00 to less than 2.75 out of 5

7- The first honors degree is granted to a student with a cumulative average from (4.75) to (5) upon graduation, and the second honors degree is granted to a student with a cumulative average from (4.25) to less than (4) upon graduation.

8-To obtain the first or second honors degree, the following is required:

A - The student must not have failed in any course he studied at the university or at another university.

B - The student must have completed the graduation requirements within a period of maximum average duration between the minimum and maximum length of stay in his college.

C - The student must have studied at the university no less than (60%) of the graduation requirements                          .

## 17. Final exam procedures

1- The College Council organizes the conduct of the exams and submits the results to the Deanship of Admission and Registration according to the instructions issued by them within a period not exceeding forty-eight hours from the date of testing any course.

2- The course instructor puts the test questions, and upon the proposal of the department head, it may be made by a person chosen by the college council.

3- The course instructor corrects the final test papers of his course, and the department head (if needed) may participate with him one or more specialists in correction, and the College Board may, when necessary, assign the correction to whoever he sees.

4-The person who corrects the final test shall monitor the grades obtained by the students in the grades for the grades prepared for that, and sign them, then the department head will certify them.

5- A student may not be tested in more than two courses in one day, and the University Council may exclude from that.

6- The student is not allowed to enter the final exam after half an hour has passed since he started, nor is he allowed to exit the exam before half an hour has passed since he started.

7- Cheating in or attempting to take the test, or violating the instructions and rules for taking the test, for which the student is punished according to the disciplinary regulations issued by the university council.

8- The College Board that teaches the course, in cases of necessity, approves the re-correction of answer papers within a period not exceeding the start of the next semester exams.

9-Based on the recommendation of the Department Council, the College Council determines the duration of the final written test, provided that it is not less than one hour and not more than three hours.

Controls for re-correcting test answer sheets:

1- Reviewing answer sheets is limited to general phenomena or unusual individual cases that need to be reviewed.

2- The student submits to the dean of the college a request to re-correct the answer sheet within a week of calculating the cumulative rates according to the university calendar or announcing the results, including the justifications for the request for a correction and a commitment from the student to the correctness of the information provided.

3-The College Board that teaches the decision making decision in the case of the request submitted by the student.

4-The correction must take place within a week of the beginning of the next semester.

5 -In the event that approval of the re-correction is approved, the College Board shall form a re-correction committee from three of the faculty members in the department to re-correct the answer sheets. The committee will report to the College Board to decide on it, and the Board's opinion will be considered final.

6- **The college that teaches the course will inform the Deanship of Admission and Registration of the result of the amendment according to the approved form no later than the end of the second week of the next academic semester**

Regulations for the final examination procedures:

Regulations for the procedures for the final exams, the college is entrusted with the following:

1 -**Preparing for the final exams to ensure the preparation of the headquarters, the presence of questions and the availability of sufficient numbers of observers, sufficient time before the start of the tests.**

2- **Follow up the progress of the tests and solve the students' problems in coordination with the relevant authorities in the university.**

3- **Ensuring that the course instructor submits the answer sheets and monitoring the grades on the system after adopting the result from the head of the department in a manner that does not exceed the period specified in the regulations.**

4- **Coordination with the departments in monitoring and reviewing the results of the decisions that it supervises.**

5- **Maintaining the assets of the lists of grades in each department.**

6- **Keeping students 'answers on paper for a period of no less than two semesters at the college that the course belongs to.**

-7**The Deanship of the College must follow up on cases of delay in monitoring the results for the specified period in accordance with the regulations and treat them with the Deanship of Admission and Registration.**

## 18. Conversion

**Transfer of a student from outside the university may be accepted in accordance with the following controls:**

1- That the student has studied at a recognized college or university with the Ministry of Higher Education for at least one semester.

2 - That the student is not failing a grade point average.

3- That he is not expelled from the university from which he was transferred for disciplinary reasons.

4- That the conversion from a scientific degree to a higher education degree not be higher.

5- The number of scheduled units that the transferred student is required to study at Al-Jouf University must not be less than (60%) of the number of scheduled units required to obtain a bachelor's degree from the university.

6- That the total amount of time spent by the student at the university from which he was transferred and what remains in the University of Al-Jouf University should be no more than the average period between the minimum and the maximum stay in the college.

7- That the conditions for admission to the department apply to him.

8- That the student's GPA is not less than (2.75) out of (5).

9- That the transfer procedures end before the end of the first week of the start of the semester, and if this period exceeds, then the transfer will be for the next semester.

10- The transfer movement must be recorded in the student's academic record.

11- The transferred student equals no more than (40%) of the approved study plan hours for the Chemistry Department.

12- The grades obtained by the student are not included in the courses that were modified for him in calculating his cumulative average.

13- That the estimation of the decision to be equivalent is not less than "good" and equivalent in the number of units.

14- The content of the course to be equivalent is not less than 70% of the content of the course in the Chemistry Department.

15- If it becomes clear after the student's transfer that he was previously dismissed for disciplinary reasons, his enrollment will be canceled from the date of acceptance of his transfer to the university.

Transferring the student to another college within the university is according to the following controls:

1- The student should not have spent more than four semesters, provided that the semesters for the preparatory programs are not counted from the term.

2- That the transfer procedures are completed during the first week of the semester, and if the procedures exceed this period, then the transfer for the following semester will not transfer the student until after at least one semester has passed in the college from which he was transferred.

3- A student is allowed to transfer once during his university studies or twice if one of them is a preparatory year.

4- The student transferred to the preparatory year shall be returned to his previous department in case he did not pass it, for one time only.

5- Allotment after passing the preparatory programs is not counted as movements.

6- All the subjects that he has previously studied are recorded in the academic record of the student transferred from one college to another, and this includes quarterly and cumulative grades and grades throughout his studies at the university.

**Transfer from one major to another within the college:**

1- Observing the transfer from one department to another within the college, the controls mentioned in the executive rule for transferring the student to another college within the university.

2- Approval of the department transferred to it.

3- An academic record of the student transferred from one major to another shall be proven in all subjects that he previously studied, and this includes semester and cumulative grades and grades throughout his studies at the university.

## 19. Students visiting

(a)-The student must have enrollment (at a cumulative rate) for one semester at the university level, prior to his application to study as a studen

(b)- The pre-approval of the college of the applicant must be obtained in order to be allowed to study, as well as the visiting students, in order to specify the courses that will be coordinated and implemented, and the college may require obtaining a specific rate for the equivalency of the course, and the study shall be instructed by the general letter of the Deanship of Admission and Registration.

(c)- You are studying in a recognized college or university.

(d)- That the course taught by the student abroad is equivalent (or equivalent) (Not less than 70% in its vocabulary and its units of study for one of the courses that include graduation requirements.

(e)-The maximum limit for the total number of units of study that can be calculated from outside the university as student visitors is (20%) of the total units of graduation from the University of Jouf

(f)-The courses that are exchanged for visiting students at other universities are not included in the GPA, and the courses are recorded in his academic record.

(g)-The student must provide the Deanship of Admission and register his results to be available during the week of the beginning of the study in the first semester of study, as a visitor, and if the applicants whose results are considered disconnected from the chapters (except for the summer semesters)

(h)-The maximum number of semesters that allow students to study abroad.

## The study in the department of mathematics college of science Jouf university for other university students

(a)- To obtain the prior written approval of his university to study the students of Jouf University, and I must mention in the letter the courses of the Department of Chemistry at the University of Jouf, which students will study.

(b)- To obtain the approval of the Mathematics Department.

(c)- Registration of decisions for the student before the competent authority, taking into account all the controls of registration in the decisions.

(d) Provides the student with the end of a discourse study explaining the results of the courses taught

# 20. Appendix A

# Academic record and grade codes

| المدلول بالإنجليزية | المدلول بالعربية | النقاط | حدود الدرجة | الرمز بالإنجليزية | الرمز بالعربية |
|---|---|---|---|---|---|
| Exceptional | ممتاز مرتفع | ٥,٠٠ | ٩٥ – ١٠٠ | A+ | أ+ |
| Excellent | ممتاز | ٤,٧٥ | ٩٠ أقل ٩٥ | A | أ |
| Superior | جيد جدا مرتفع | ٤,٥٠ | ٨٥ أقل من ٩٠ | B+ | ب+ |
| Very Good | جيد جدا | ٤,٠٠ | ٨٠ أقل من ٨٥ | B | ب |
| Above Average | جيد مرتفع | ٣,٥٠ | ٧٥ أقل من ٨٠ | C+ | ج+ |
| Good | جيد | ٣,٠٠ | ٧٠ أقل من ٧٥ | C | ج |
| High Pass | مقبول مرتفع | ٢,٥٠ | ٦٥ أقل من ٧٠ | D+ | د+ |
| Pass | مقبول | ٢,٠٠ | ٦٠ أقل من ٦٥ | D | د |
| Fail | راسب | ١,٠٠ | أقل من ٦٠ | F | هـ |
| In-Progress | مستمر | – | – – – – – | IP | م |
| In-Complete | غير مكتمل | – | – – – – – | IC | ل |
| Denile | محروم | ١,٠٠ | – – – – – | DN | ح |
| Nograde-Pass | ناجح دون درجة | – | ٦٠ وأكثر | NP | ند |
| Nograde-Fail | راسب دون درجة | – | أقل من ٦٠ | NF | هد |
| Withdrawn | منسحب بعذر | – | – – – – – | W | ع |

# 21. Appendix B
# Example of calculating the quarterly and cumulative

الفصل الأول :

| عدد النقاط | وزن التقدير | رمز التقدير | الدرجة المئوية | عدد الوحدات | المقرر |
|---|---|---|---|---|---|
| ٩،٠٠ | ٤،٥٠ | ب+ | ٨٥ | ٢ | ٣٠١ سلم |
| ٩،٠٠ | ٣،٠٠ | ج | ٧٠ | ٣ | ٣٢٤ كيم |
| ١٤،٢٥ | ٤،٧٥ | أ | ٩٢ | ٣ | ٢٣٥ ريض |
| ١٦،٠٠ | ٤،٠٠ | ب | ٨٠ | ٤ | ٣١٢ فيز |
| ٤٨،٢٥ | | | | ١٢ | المجموع |

$$\text{معدل الفصل الأول} = \frac{\text{مجموع النقاط } (٤٨،٢٥)}{\text{مجموع الوحدات } (١٢)} = ٤،٠٢$$

الفصل الثاني :

| عدد النقاط | وزن التقدير | رمز التقدير | الدرجة المئوية | عدد الوحدات | المقرر |
|---|---|---|---|---|---|
| ١٠ | ٥،٠٠ | أ+ | ٩٦ | ٢ | ١٠٤ سلم |
| ١٢ | ٤،٠٠ | ب | ٨٣ | ٣ | ٣٢٧ كيم |
| ١٢ | ٣،٠٠ | ج | ٧١ | ٤ | ٣١٤ ريض |
| ١٢ | ٤،٠٠ | ب | ٨١ | ٣ | ٣٢٦ فيز |
| ٤٦ | | | | ١٢ | المجموع |

$$\text{معدل الفصل الثاني} = \frac{٤٦}{١٢} = ٣،٨٣$$

$$\text{المعدل التراكمي} = \frac{\text{مجموع النقاط } (٤٨،٢٥ + ٤٦)}{\text{مجموع الوحدات } (١٢ + ١٢)} = ٣،٩٣$$

# 22 -Appendix (B)

**New study plan for the Bachelor's degree of Mathematics Department (Number of Units 134)**

## Level First

| Code | Course Name | Credit (LT, LB , ET) | Prerequisite |
|---|---|---|---|
| ENGL 101 | English (1) | 3(2,0,2) | -- |
| HTM101 | Introduction of Mathematics | 3(2,0,2) | -- |
| BIO 101 | General Biology | 3(2,2,0) | -- |
| ISL101 | Islamic Culture | 2(2,0,0) | -- |
| CIS101 | Computer skill | 3(2,2,0) | -- |
| EDU101 | Skills of University Life | 2(2,0,0) | -- |
| Total credit | | 16 Unit | |

## Level Second

| Code | Course Name | Credit (LT, LB , ET) | Prerequisite |
|---|---|---|---|
| ENGL 102 | English(2) | 3(2,0,2) | ENGL 101 |
| PHS101 | General physics (1) | 4(3,2,0) | -- |
| HTM102 | Differential Calculus | 3(2,0,2) | HTM101 |
| CHM101 | General chemistry | 4(3,2,0) | -- |
| ARAB101 | Arab language skills | 2(2,0,0) | -- |
| LSI 100 | Studies in the Prophet's biography | 2(2,0,0) | - |
| Total credit | | 18 Unit | |

## Level Third

| Code | Course Name | Credit (LT, LB , ET) | Prerequisite |
|---|---|---|---|
| MTH203 | Integral Calculus | 3(2,0,2) | MTH102 |
| MTH231 | Basics of Mathematics | 3(2,0,2) | MTH102 |
| STAT 201 | General Statistics | 2(1,0,2) | MTH102 |
| MTH221 | Math programs and programming | 3(2,2,0) | CIS 101 |
| ARAB102 | Arabic writing | 2(2,0,0) | -- |
| ISLXXX | Islamic elective course | 2(2,0,0) | -- |
| Total credit | | 15 Unit | |

## Level Fourth

| Code | Course Name | Credit (LT, LB , ET) | Prerequisite |
|---|---|---|---|
| HTM204 | Advanced Calculus | 3(2,0,2) | MTH203 |
| HTM211 | Real Analysis (1) | 3(2,0,2) | MTH231 |
| HTM241 | Linear algebra (1) | 3(2,0,2) | MTH203 |
| HTM242 | Number Theory | 3(2,0,2) | MTH231 |
| STAT202 | Probability (1) | 3(2,0,2) | STAT 201&MTH203 |
| ISL XXX | Islamic elective course | 2(2,0,0) | |
| Total credit | | 17 Unit | |

## Level Fifth

| Code | Course Name | Credit (LT, LB , ET) | Prerequisite |
|---|---|---|---|
| MTH305 | Differential Equations | (2,0,2)3 | MTH 204 |
| MTH343 | NumericalAnalysis(1) | (0,2,2)3 | MTH 241& MTH 221 |
| MTH332 | (1) Abstract Algebra | (2,0,2)3 | MTH 241& MTH 242 |

## Level Sixth

| Code | Course Name | Credit (LT, LB , ET) | Prerequisite |
|---|---|---|---|
| MTH306 | Partial differential equations | (2,0,2)3 | MTH 305 |
| MTH312 | Real Analysis (2) | (2,0,2)3 | MTH211 |
| STAT 303 | Data Analysis | (0,2,2)3 | MTH 343& STAT 202 |

| MTH322 | Linear Programming | (2,0,2)3 | MTH 241 | | MTH XXX | Optional(1) | (2,0,2)3 | -- |
|--------|--------------------|----------|---------|---|---------|-------------|----------|-----|
| MTH351 | Statistics | (2,0,2)3 | MTH203 | | MTH XXX | Optional(2) | (2,0,2)3 | -- |
| EDU/ BUS | Optional Course | (0,0,2)2 | -- | | | | | |
| Total credit | | 17 Unit | | | 15 Unit | | Total credit | |

## Level Seventh

| Code | Course Name | Credit (LT, LB , ET) | Prerequisite |
|------|-------------|----------------------|--------------|
| MTH 424 | Optimality Techniques | 3(2,0,2) | MTH322 |
| MTH434 | Abstract Algebra(2) | 3(2,0,2) | MTH332 |
| MTH445 | NumericalAnalysis (2) | 3(2,0,2) | MTH 242& MTH 305& MTH 343 |
| STAT 404 | Statistical Theory (1) | 3(2,0,2) | STAT 303 |
| MTH413 | Special Functions | 3(2,0,2) | MTH312 |
| MTH XXX | Optional(3) | 3(2,0,2) | -- |
| Total credit | | 18 Unit | |

## Level Eightieth

| Code | Course Name | Credit (LT, LB , ET) | Prerequisite |
|------|-------------|----------------------|--------------|
| MTH 461 | Topology | 3(2,0,2) | MTH312 |
| MTH 407 | Differential Geometry | 3(2,0,2) | MTH 241& MTH306 |
| MTH 414 | Complex Analysis | 3(2,0,2) | MTH312 |
| MTH 471 | Graduation Project | 3(0,6,0) | Complete 100 Units |
| MTH XXX | Optional(4) | 3(2,0,2) | -- |
| MTH XXX | Optional(5) | 3(2,0,2) | -- |
| Total credit | | 18 Unit | |

# )Appendix(T23-

## Elective courses of Mathematics Department (15 hours)

| Level | Prerequisite | Credit Hours | | | | Course Name | Course Code | Course number | S.N. |
|-------|--------------|--------------|--------------------|-----------|-------------|-------------|-------------|---------------|------|
| | | Credit | Training/ Exercise | Practical | Theoretical | | | | |
| 6 | STAT 202 | 3 | 2 | 0 | 2 | Prediction Methods | MTH | 323 | 1 |
| | MTH241 | 3 | 2 | 0 | 2 | Linear Algebra (2) | MTH | 344 | 2 |
| | MTH 241 | 3 | 2 | 0 | 2 | Entrance to the fixtures | MTH | 333 | 3 |

| 7 | MTH 332 | 3 | 2 | 0 | 2 | Discrete Mathematics | MTH | 436 | 4 |
| | MTH 351 | 3 | 2 | 0 | 2 | Dynamics | MTH | 452 | 5 |
| | Pass 80 Credit Units | 3 | 2 | 0 | 2 | Selected Topics (Department Approve) | MTH | 481 | 6 |
| 8 | STAT404 | 3 | 2 | 0 | 2 | Probability (2) | STAT | 405 | 7 |
| | MTH 312 | 3 | 2 | 0 | 2 | Functional Analysis | MTH | 462 | 8 |
| | MTH 306 | 3 | 2 | 0 | 2 | Mathematical modeling | MTH | 425 | 9 |

| Total | Elective University Specialization | University Courses Specialization | University Courses | | Elective University Courses | University Courses | Prerequisite |
| | | | Course Included the Deptt | Course Excluded the Deptt | | | |
| 134 | 15 | 75 | 8 | 11 | 6 | 19 | Hours |

# 24-Appendix(C)

# Study Plan for the Mathematics Department (134 Units)

**First Level**

| Code | Course name | Credit (LT, LB , ET) | Prerequisite |
| --- | --- | --- | --- |
| ENGL 101 | English (1) | 3(2,2,0) | -- |
| MTH101 | Introductory to mathematics | 3(2,0,2) | -- |

**Second Level**

| Code | Course name | Credit (LT, LB , ET) | Prerequisite |
| --- | --- | --- | --- |
| ENGL102 | English (2) | 3(2,2,0) | ENGL101 |
| PHS 101 | General physics (1) | 4(3,2,0) | -- |

| BIO 101 | General Biology | 3(2,0,2) | -- | MTH 102 | Differential Calculus | 3(2,0,2) | MTH101 |
|---------|----------------|----------|----|---------|-----------------------|----------|--------|
| ISL101 | Islamic Culture | 2(2,0,0) | -- | CHM 101 | General chemistry | 4(3,2,0) | -- |
| CIS 101 | Computer skills | 3(2,2,0) | -- | ARAB101 | Arab language skills | 2(2,0,0) | -- |
| EDU101 | University Life Skills | 2(2,0,0) | -- | ISL 100 | Studies in the Biography of the Prophet | 2(2,0,0) | -- |
| Total credit | | 16 Unit | | Total credit | | 16 Unit | |

**Third Level**

**Fourth Level**

| Code | Course name | Credit (LT, LB , ET) | Prerequisite | Code | Course name | Credit (LT, LB , ET) | Prerequisite |
|------|-------------|----------------------|--------------|------|-------------|----------------------|--------------|
| MTH203 | Integral Calculus | 3(2,0,2) | MTH102 | MTH204 | Advanced Calculus | 3(2,0,2) | MTH203 |
| MTH231 | Basics of Mathematics | 3(2,0,2) | MTH102 | MTH211 | Real Analysis (1) | 3(2,0,2) | MTH231 |
| STAT 201 | General Statistics | 2(1,0,2) | MTH102 | MTH241 | Linear algebra (1) | 3(2,0,2) | MTH203 |
| MTH221 | Math programs and programming | 3(2,2,0) | CIS 101 | MTH242 | Number Theory | 3(2,0,2) | MTH231 |
| ARAB102 | Arabic writing | 2(2,0,0) | -- | STAT 202 | Probability (1) | 3(2,0,2) | STAT 201&MTH203 |
| ISLXXX | Islamic elective course | 2(2,0,0) | -- | ISL XXX | Islamic elective course | 2(2,0,0) | -- |
| Total credit | | 15 Unit | | Total credit | | 17 Unit | |

**Fifth Level**

**Sixth Level**

| Code | Course name | Credit (LT, LB , ET) | Prerequisite | Code | Course name | Credit (LT, LB , ET) | Prerequisite |
|------|-------------|----------------------|--------------|------|-------------|----------------------|--------------|
| MTH305 | Differential Equations | 3(2,0,2) | MTH 204 | MTH306 | Partial Differential Equations | 3(2,0,2) | MTH 305 |
| MTH343 | NumericalAnalysis (1) | 3(2,0,2) | MTH 241& MTH 221 | MTH312 | Real Analysis (2) | 3(2,0,2) | MTH211 |
| MTH332 | (1) Abstract Algebra | 3(2,0,2) | MTH 241& MTH 242 | STAT 303 | Data Analysis | 3(2,2,0) | MTH 343& STAT 202 |
| MTH322 | Math. Linear Programming | 3(2,0,2) | MTH 241 | MTH XXX | Math Elective course 1 | 3(2,0,2) | -- |
| MTH351 | Statics | 3(2,0,2) | MTH203 | MTH XXX | Math Elective course 2 | 3(2,0,2) | -- |

| EDU/ BUS | Edu. elective course | 2(2,0,0) | -- | | | | |
|----------|---------------------|----------|-----|---|---|---|---|
| **Total credit** | | **17 Unit** | | **Total credit** | | **17 Unit** | |

**Seventh Level**

| Code | Course name | Credit (LT, LB , ET) | Prerequisite |
|------|-------------|----------------------|--------------|
| MTH 424 | Optimality Techniques | 3(2,0,2) | MTH322 |
| MTH434 | Abstract Algebra(2) | 3(2,0,2) | MTH332 |
| MTH445 | NumericalAnalysis (2) | 3(2,0,2) | MTH 242& MTH 305& MTH 343 |
| STAT 404 | Statistical Theory (1) | 3(2,0,2) | STAT 303 |
| MTH413 | Special functions | 3(2,0,2) | MTH312 |
| MTH XXX | Math Elective course 3 | 3(2,0,2) | -- |
| **Total credit** | | **18 Unit** | |

**Eighth Level**

| Code | Course name | Credit (LT, LB , ET) | Prerequisite |
|------|-------------|----------------------|--------------|
| MTH 461 | Topology | 3(2,0,2) | MTH312 |
| MTH 407 | Differential Geometry | 3(2,0,2) | MTH 241& MTH306 |
| MTH 414 | Complex Analysis | 3(2,0,2) | MTH312 |
| MTH 471 | Graduation Project | 3(0,6,0) | Complete 100 Units |
| MTH XXX | Math Elective course 4 | 3(2,0,2) | -- |
| MTH XXX | Math Elective course 5 | 3(2,0,2) | -- |
| **Total credit** | | **18 Unit** | |

# Appendix(H)25-

# Mathematics Elective Courses

| Level | Course Codes and Numbers | Course Name | Credit | | | | Prerequisite |
|-------|--------------------------|-------------|--------|-----|-----|------|--------------|
| | | | LT | LB | ET | Unit | |
| Sixth | MTH 323 | Forecasting methods | 2 | 0 | 2 | 3 | STAT 202 |
| | MTH344 | (2)Linear Algebra | 2 | 0 | 2 | 3 | MTH241 |
| | MTH 333 | Combinatorics | 2 | 0 | 2 | 3 | MTH241 |
| Seventh | MTH 436 | Discrete Mathematics | 2 | 0 | 2 | 3 | MTH332 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | MTH 452 | **Dynamics** | 2 | 0 | 2 | 3 | **MTH 351** |
| | MTH 481 | **Selected Topics ( Approved by the department)** | 2 | 0 | 2 | 3 | **Complete 80 Units** |
| | | | | | | | |
| Eighth | **STAT 405** | **Probability (2)** | **2** | **0** | **2** | **3** | **STAT404** |
| | **MTH 462** | **Functional Analysis** | **2** | **0** | **2** | **3** | **MTH312** |
| | **MTH 425** | **Mathematical Modeling** | **2** | **0** | **2** | **3** | **MTH306** |

| Prerequisite | Compulsory for University | Elective for University | Compulsory for college | | Compulsory for Department | Elective for Department | Total |
|---|---|---|---|---|---|---|---|
| | | | Outside the department | Inside the department | | | |
| Hours | 19 | 6 | 11 | 8 | 75 | 15 | 134 |

# 26:Appendix(D)

# Courses Taught by the Department

| Colleges | Level | Prerequisite | Credit (LT, LB, ET) | Course Name (English) | Course Name (Arabic) | Course code (English) | Course code (Arabic) | S.N. |
|---|---|---|---|---|---|---|---|---|
| Preparatory year/Faculty of Science | First | -- | (2,0,2)3 | Introductory Mathematics | مقدمة في الرياضيات | MTH 101 | رياض 101 | 1 |
| Preparatory year/Faculty of Science | Second | MTH 101 | (2,0,2)3 | Differential Calculus | حساب التفاضل | MTH 102 | رياض 102 | 2 |
| Faculties: Science/Engg/CS | Third | MTH 102 | (2,0,2)3 | Integral Calculus | حساب التكامل | MTH 203 | رياض 203 | 3 |
| Faculties: Science/Engg | Fourth | MTH 203 | (2,0,2)3 | Advanced Calculus | حساب التفاضل والتكامل المتقدم | MTH 204 | رياض 204 | 4 |
| Faculties: Science/Engg | Fifth | MTH 204 | (2,0,2)3 | Differential Equations | معادلات تفاضلية | MTH 205 | رياض 205 | 5 |
| Faculties: Science/CS | Fourth | MTH 203 | (2,0,2)3 | Linear Algebra (1) | الجبر الخطي (1) | MTH 241 | رياض 241 | 6 |
| Faculy: Engg | Sixth | MTH205 | (2,0,2)3 | Numerical Methods | الطرق العددية | MTH 391 | رياض391 | 7 |
| Faculties: Science/Engg/CS | Fourth | MTH 203 | (2,0,2)3 | Statistics and Probabilities | الإحصاءوالاحتمالات | STAT 309 | احص 309 | 8 |
| Faculties: Medicine/Dentistry/Medical Science/ Pharmacy | First | -- | (2,0,2)3 | Biostatistics | الإحصاء الحيوي | STAT 103 | احص 103 | 9 |
| Faculties:Science (Department of Physics) and CS | Fourth | MTH 203 | (2,0,2)3 | Introduction to Differential Equations | مقدمة في المعادلات التفاضلية | MTH 294 | رياض 294 | 10 |
| College of Science (all Departments) | Third | MTH 101 | (2,0,1)2 | General Statistics | الإحصاء العام | STAT 201 | احص201 | 10 |

# Used symbols of classify courses27:

| Symbol | | Specialization | Symbol | | Specialization |
|--------|--------|----------------|--------|--------|----------------|
| English | Arabic | | English | Arabic | |
| PHYS | فز | Physics | ISL | سلم | Islamic Culture |
| CHM | كم | Chemistry | ARAB | عرب | Arabic Language |
| CIS | حسب | computer | ENGL | نجل | English Language |
| BIO | احيا | Biology | MTH | رياض | Mathematics |
| BCHM | كيح | Biochemistry | STAT | احص | Statistics |