| Date: | Examination No.: | Version:2021-2022 | Start:1/9/2022 |
| :---: | :---: | :---: | :---: |
| Module Name Code | Math III - 0109 |  |  |
| Module <br> Language: | English |  |  |
| Responsible: | Maha George Zia |  |  |
| Lecture (s): | Maha George Zia |  |  |
| College: | College of Engineering - Salahaddin University-Erbil |  |  |
| Duration: | 15 week - 1 semester |  |  |
| Course outcomes: | The course deals with the fundamental principles of Math III. This course is a mandatory requirement for the BSc in Electrical Engineering. As an introductory course, a good treatment of the basic principles is important for a proper understanding of the subject matter and for confidence in applying these principles to practical problem solving. |  |  |
| Course Content: | - Vectors (vector representation, operation \& product) <br> - Polar coordinates system <br> - Differential Equations <br> - Function of more than one Variables |  |  |
| Literature: | Thomas Finney: Calculus and analytic geometry, Addison Wesley Publishing company, $9^{\text {th }}$ edition, 1998 <br> George F. Simons: Calculus and analytic geometry, McGraw- Hill companies, INC, $2^{\text {nd }}$ edition, 1996. <br> John Bird: Engineering Mathematics. Elsevier, $4^{\text {th }}$ edition, 2008. |  |  |
| Type of Teaching: | 3 hrs . in lectures +1 hour tutorial |  |  |
| Pre-requisites: | Math II- 0108 |  |  |
| Preparation Modules: |  |  |  |
| Frequency: | Autumn Semester |  |  |
| Requirements for credit points: | For the award of credit points, it is necessary to pass the module exam. It contains: Two examinations (quizzes) during the academic semester, two assignments (homework) and Final examination. <br> Student's attendance is required in all classes. |  |  |
| Credit point: | 5 |  |  |
| Grade Distribution: | The module exam is based on the summation of two categories of evaluations: <br> First: $\mathbf{( 4 0 \%})$ of the mark is based on the academic semester effort which includes Two examination (quizzes) during the academic semester $=20 \%$. Two assignments (homework) $=(20 \%)$. <br> Second: ( $\mathbf{6 0 \%}$ ) of the mark is based on final examination that is comprehensive for the whole of the study materials reviewed during the academic semester. |  |  |
| Work load: | The workload is 96 hrs . It is the result of 48 hrs . attendance and 48 hrs . self-studies (Assignments, preparation for exam and applications). |  |  |

