



## Zarqa University, Study Plan for Master Degree in Mathematics, Thesis Track

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The study plan consists of (33) credit hours as follows:

I. Compulsory Courses: (15) credit hours as follows:

| Course no. | Course title                                   | Cr. Hrs. | Pre-requisite |
|------------|--|----------|---------------|
| 0301751    | Methods of Applied Mathematics 1               | 3        |               |
| 0301752    | Real Analysis (Measure Theory and Integration) | 3        |               |
| 0301753    | Modern Algebra 1                               | 3        |               |
| 0301754    | General Topology 1                             | 3        |               |
| 0301756    | Theory of Ordinary Differential Equations      | 3        |               |

II. Elective courses: (9) credit hours to be chosen from one of the following Subjects:

| Course no. | Course title                           | Cr. Hrs. | Pre-requisite |
|------------|--|----------|---------------|
| 0301755    | Mathematical Statistics                | 3        |               |
| 0301757    | Partial Differential Equations         | 3        |               |
| 0301758    | Functional Analysis                    | 3        |               |
| 0301759    | Complex Analysis                       | 3        |               |
| 0301760    | Advanced Numerical Analysis            | 3        |               |
| 0301761    | Probability Theory                     | 3        |               |
| 0301762    | Nonparametric statistics               | 3        |               |
| 0301763    | Linear Statistics Models               | 3        |               |
| 0301764    | Stochastic Processes                   | 3        |               |
| 0301765    | Modern Algebra 2                       | 3        |               |
| 0301766    | Advanced Matrix Theory                 | 3        |               |
| 0301767    | Analytic Number Theory                 | 3        |               |
| 0301768    | Topology 2                             | 3        |               |
| 0301769    | Algebraic Topology                     | 3        |               |
| 0301770    | Methods of Applied Mathematics 2       | 3        |               |
| 0301771    | Dynamical systems                      | 3        |               |
| 0301772    | Graph theory                           | 3        |               |
| 0301773    | Selected Topics in Pure Mathematics    | 3        |               |
| 0301774    | Selected Topics in Applied Mathematics | 3        |               |
| 0301775    | Selected Topics in Statistics          | 3        |               |

III. Thesis:

| Course no. | Course title       | Cr.Hrs. | Pre-requisite |
|------------|--------------------|---------|---------------|
| 0301799    | Thesis             | 9       |               |
| 0301000    | Thesis in Progress | 0       |               |

