| Study Plan Approval Date | Mathematics Study Plan | Study Plan Code |
|---|---|---|
| ___ /___ / 2024 | | SCI._MATH. _0203 |



# Tafila Technical University

# College of Science

This study plan is applied to the students admitted into the Bachelor's

program

in Mathematics for the academic year 2024/2025

# Study Plan for B.Sc. in Mathematics

Offered Degree: B.Sc. in Mathematics

# Tafila Technical University
## College of Science
## Department of Mathematics

## Advisory Plan for Bachelor of Science Students in Mathematics

| First Academic Year - Mathematics | | | | | | | |
|---|---|---|---|---|---|---|---|
| **The First Semester** | | | | **The Second Semester** | | | |
| Course Number | Course Name | No. of Credit Hours | Pre-Requisite | Course Number | Course Name | No. of Credit Hours | Pre-Requisite |
| 0213105 | Calculus 1 | 3 | (1) | 0213106 | Calculus 2 | 3 | 0213105 |
| 0213101 | General Physics 1 | 3 | (2) | 0213102 | General Physics 2 | 3 | 0213101 |
| 0213103 | General Physics Lab.1 | 1 | 0213101 (3) | 0213109 | General Biology 1 | 3 | None |
| 0213115 | Principles of Statistics 1 | 3 | None | 0213104 | General Physics Lab. 2 | 1 | 0213102 (3) |
| 0213116 | Principles of Statistics Lab.1 | 1 | 0213115 (3) | | University Elective Requirement | 3 | |
| | University Elective Requirement | 3 | | | Obligatory University Requirement | 3 | |
| | Obligatory University Requirement | 3 | | | | | |
| **Total** | | **17** | | **Total** | | **16** | |

**(1)** (High School Mathematics) or Prerequisite Calculus 0213098.
**(2)** (High Sschool Physics) or Prerequisite Physics 0213097.
**(3)** (High School Chemistry) or Prerequisite Chemistry 0213099.

# Tafila Technical University

## College of Science

## Department of Mathematics

| Second Academic Year - Mathematics | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **The First Semester** | | | | | **The Second Semester** | | | |
| Course Number | Course Name | No. of Credit Hours | Pre-Requisite | | Course Number | Course Name | No. of Credit Hours | Pre-Requisite |
| 0213107 | General chemistry 1 | 3 | (4) | | 0203231 | Principles of Statistics 2 | 3 | 0213115 |
| 0213108 | General Chemistry Lab. 1 | 1 | 0213107 (4) | | 0203212 | Logic & Set Theory | 3 | 0213106 |
| 0203220 | Calculus 3 | 3 | 0213106 | | 0203213 | Euclidean & non-Euclidean Geometry | 3 | 0203212 |
| 0203223 | Ordinary Differential Equations 1 | 3 | 0213106 | | 0203224 | Mathematical Methods 1 | 3 | 0203223 |
| 0203211 | Linear Algebra 1 | 3 | 0213106 | | 0203222 | Advanced Calculus | 3 | 0203220 |
| --- | Obligatory University Requirement | 3 | | | --- | Obligatory University Requirement | 3 | |
| **Total** | | **16** | | | **Total** | | **18** | |

**(4)** or concurrent

# Tafila Technical University

## College of Science

## Department of Mathematics

<table>
<tr><td colspan="8"><strong>Third Academic Year- Mathematics</strong></td></tr>
<tr><td colspan="4"><strong>The First Semester</strong></td><td colspan="4"><strong>The Second Semester</strong></td></tr>
<tr>
<td>Course Number</td><td>Course Name</td><td>No. of Credit Hours</td><td>Pre-Requisite</td>
<td>Course Number</td><td>Course Name</td><td>No. of Credit Hours</td><td>Pre-Requisite</td>
</tr>
<tr>
<td>0203232</td><td>Introduction to Probability</td><td>3</td><td>0203222</td>
<td>0203330</td><td>Mathematical Statistics</td><td>3</td><td>0203231</td>
</tr>
<tr>
<td>0203326</td><td>Real Analysis 1</td><td>3</td><td>0203212</td>
<td>0203314</td><td>Modern Algebra 1</td><td>3</td><td>0203212</td>
</tr>
<tr>
<td>0203310</td><td>Complex Analysis 1</td><td>3</td><td>0203222</td>
<td>0203315</td><td>Topology 1</td><td>3</td><td>0203213</td>
</tr>
<tr>
<td>0203321</td><td>Partial Differential Equations 1</td><td>3</td><td>0203223</td>
<td>0203322</td><td>Numerical Analysis 1</td><td>3</td><td>0203223</td>
</tr>
<tr>
<td></td><td>Elective Specialization Requirement</td><td>3</td><td></td>
<td></td><td>University Specialisation Requirement</td><td>3</td><td></td>
</tr>
<tr>
<td></td><td>University Elective Requirement</td><td>3</td><td></td>
<td></td><td>Elective Specialisation Requirement</td><td>3</td><td></td>
</tr>
<tr>
<td colspan="2"><strong>Total</strong></td><td><strong>18</strong></td><td></td>
<td colspan="2"><strong>Total</strong></td><td><strong>18</strong></td><td></td>
</tr>
</table>

## Fourth Academic Year - Mathematics

| The First Semester | | | | The Second Semester | | | |
|---|---|---|---|---|---|---|---|
| Course Number | Course Name | No. of Credit Hours | Pre-Requisite | Course Number | Course Name | No. of Credit Hours | Pre-Requisite |
| 0203419 | Real Analysis 2 | 3 | 0203326 | 0203446 | Mathematical Methods in Artificial Intelligent | 3 | 0203322 |
| 0203420 | Numerical Analysis 2 | 3 | 0203322 | 0203414 | Modern Algebra 2 | 3 | 0203314 |
| 0203425 | Mathematical Packages | 3 | 0203322 | 0203448 | Seminar in Mathematics | 1 | (1) |
| 0203418 | Number Theory | 3 | 0203212 | | Elective Specialization Requirement | 3 | |
| | University Elective Requirement | 3 | | | Elective Specialization Requirement | 3 | |
| | | | | | University Elective Requirement | 3 | |
| | **Total** | **15** | | | **Total** | **16** | |

**(1)** Successfully complete a minimum of 90 credit hours.