**APPENDIX I**

**Time Table**

**Department of Mathematics**

for

**B.S (2nd Year Onwards)**

**M.Sc. / MS**

**Ph.D**

**Suggested Course Template for B.S Mathematics**

**(1st and 2nd Year)**

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| **1st Year 1st Semester** | **1st Year 2nd Semester** |
| **Course Number Units**  **MTH101 11**  **PHY103 11**  **ESC101 14**  **CHM101 03**  **HSS-1 / ENG112 11**  **PE101 03**  **Total 53** | **Course Number Units**  **MTH102 11**  **PHY102 11**  **TA101 09**  **LIF101 06**  **PHY101 03**  **CHM102 08**  **PE102 03**  **Total 51** |

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| **2nd Year 1st Semester** | **2nd Year 2nd Semester** |
| **Course Number Units**  **ESC201 14**  **TA201 06**  **ESO / SO\* 11**  **MTH301 11**  **MTH204 11**  **COM200 05**  **Total 58** | **Course Number Units**  **HSS-1 11**  **TA202 06**  **MSO201 11**  **ESO / SO\* 11**  **MTH421 11**  **MTH302 11**  **Total 61** |

**ESO/SO\*: Any ESO/SO (Except ESO207)**

**Suggested Course Template for B.S Mathematics**

**(3rd and 4th Year)**

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| **3rd Year 1st Semester** | **3rd Year 2nd Semester** |
| **Course Number Units**  **ESO207 09**  **MTH305 11**  **MTH403 11**  **HSS-II 09**  **OE 09**  **UGP\* 04**  **MTH Comm. Skills 02**  **Total 51/55** | **Course Number Units**  **MTH424 11**  **MTH308 11**  **OE 09**  **HSS-II 09**  **DE/OE/UGP 09**  **OE 09**  **Total 58** |

**UGP\*: Optional (does not count towards DE/OE credits)**

|  |  |
| --- | --- |
| **4th Year 1st Semester** | **4th Year 2nd Semester** |
| **Course Number Units**  **DE 09**  **MTH401 09**  **MTH423 11**  **HSS-II / DE 09**  **DE/OE/UGP 09**  **Total 47** | **Course Number Units**  **DE/HSS-II 09**  **OE 09**  **OE 09**  **OE 09**  **DE 09**  **UGP(Extra)\* 09**  **Total 45/54** |

**UGP(Extra)\*: Optional (does not count towards DE/OE credits)**

1. **Minimum OE units: 54**
2. **Minimum DE units: 27**
3. **Combined DE and OE units (with up to 18 units of UGP): 99**
4. **HSS-I units: 22; HSS-II units: 27**

**MATH Department**

**3rd / 5th / 7th and PG (odd) Semester Time Table**

**Section for 3rd Semester Courses MTH: C8(28), C9(21)**

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| **Day** | **Semester** | **8:00-8:50** | **9:00-9:50** | **10:00-10:50** | | **11:00-11:50** | **12:00-12:50** |  | **14:00-14:50** | **15:00 – 15:50** | | | **16:00 – 16:50** | | **17:10-18:00** |
| **M** | **3rd** | **ESC201 (L)** | ESO206 (L)  MSO202a (T)  MSO203b (T) | ESO201 (L)  ESO202 (L)  ESO203 (L) | | ESO204 (L)  ESO205 (L)  ESO208 (L) | **MTH301 (L)** |  | ESO203 LAB. [14:00 – 15:50]  ESO205 LAB. [14:00 – 16:50] | | | | | | **MTH204 (L)** |
| **5th** | **MTH403 (L)** | **ESO207 (L)** | | **MTH305 (L)** | **DE-3**  **[12:00 – 13:15]** | **OE-4**  **DE-4**  **[14:00 – 15:15]** | | | **OE-5**  **DE-5**  **[15:35 – 16:50]** | | | ESO209 |
| **7th** | **MTH428**  **OE-7** | **DE-1**  **[9:00 – 10:15]** | | **DE-2**  **[10:35 – 11:50]** | | **OE-1 (L)**  **HSS-II (1)** |
| **9th / PG** | **PG-1**  **MTH515** | **PG-11a** | **PG-2a**  **MTH201**  **MTH517** | | **PG-3a**  **MTH409**  **MTH511**  **MTH405** | **PG-4** | **PG-7a**  **MTH413** | | **PG-8a**  **MTH415** | | | **PG-9a**  **MTH417** | **PG-12a** |
| **T** | **3rd** |  | **TA201** | **COM200 [10:00 – 11:50]** | | |  |  | **TA201 (P) [C8, C9]** | | | | | | **MTH204 (T)** |
| **5th** |  | **MTH403 (L)** | **MTH Communication Skills** | | | **HSS-II (2)** | **OE-5**  **DE-5**  **[14:00 – 15:15]** | | | **OE-6**  **DE-6**  **[15:35 – 16:50]** | | | ESO209 (T) |
| **7th** | **MTH423 (L)** | **MTH428**  **OE-7** |  | |  | **MTH401 (L)** | **DE (T)**  **OE (T)** |
| **9th / PG** | **PG-10** | **PG-1**  **MTH515** | **PG-2a**  **MTH201**  **MTH517** | | **PG-3a**  **MTH409**  **MTH511**  **MTH405** | **PG-11a** | **PG-7a**  **MTH413** | | **PG-8a**  **MTH415** | | | **PG-9a**  **MTH417** | **PG (T)** |
| **W** | **3rd** | **ESC201 (L)** | MSO202a (L)  MSO203b (L)  ESO206 (L) | ESO201 (L)  ESO202 (L)  ESO203 (L) | | ESO204 (L)  ESO205 (L)  ESO208 (L) | **MTH301 (L)** |  | ESO203 LAB. [14:00 – 15:50]  ESO205 LAB. [14:00 – 16:50] | | | | | | **MTH204 (L)** |
| **5th** |  | **ESO207 (L)** | | **MTH305 (L)** | **HSS-II (2)** | **DE (T)**  **MTH428 (T)**  **OE (T)** | **MTH403 (L)** | | |  | | ESO209 |
| **7th** | **MTH423 (L)** | **OE-2**  **[9:00 – 10:15]** | | **OE-3**  **[10:35 – 11:50]** | | **DE (T)**  **OE (T)** |  | | | **MTH401 (L)** | | **OE-1 (L)**  **HSS-II (1)** |
| **9th / PG** | **PG-10** | **PG-5** | | **PG-6** | | **PG (T)**  **MTH511 (T)** | **PG (T)**  **MTH417 (T)**  **MTH405 (T)**  **MTH515 (T)** | **PG-12a** | | |  | | **PG-13a**  **[17:10 – 18:25]** |
| **TH** | **3rd** | **ESC201 (L)** | MSO202a (L)  MSO203b (L)  ESO206 (T) | ESO201 (T)  ESO202 (T)  ESO203 (T) | | ESO204 (T)  ESO205 (T)  ESO208 (T) | **MTH301 (T)** |  |  | | | | | |  |
| **5th** |  |  | | **MTH305 (T)** | **DE-3**  **[12:00 – 13:15]** | **OE-4**  **DE-4**  **[14:00 – 15:15]** | | | **OE-6**  **DE-6**  **[15:35 – 16:50]** | | | **DE (T)**  **OE (T)** |
| **7th** | **MTH423 (L)** | **DE-1**  **[9:00 – 10:15]** | | **DE-2**  **[10:35 – 11:50]** | |
| **9th / PG** | **PG-10** | **PG-11a** | **PG-2a**  **MTH201**  **MTH517** | | **PG-3a**  **MTH409**  **MTH511**  **MTH405** | **PG-4** | **PG-7a**  **MTH413** | | **PG-8a**  **MTH415** | | | **PG-9a**  **MTH417** | **PG (T)**  **MTH409 (LAB)** |
| **F** | **3rd** | **ESC201 (L)** | MSO202a (L)  MSO203b (L)  ESO206 (L) | ESO201 (L)  ESO202 (L)  ESO203 (L) | | ESO204 (L)  ESO205 (L)  ESO208 (L) | **MTH301 (L)** |  | **ESC201 (P) [C8, C9]** | | | | | | **MTH204 (L)** |
| **5th** | **MTH403 (L)** | **ESO207 (L)** | | **MTH305 (L)** | **HSS-II (2)** | **DE (T)**  **OE (T)** |  | | | |  | **OE-1 (L)**  **HSS-II (1)** |
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| **7th** | **MTH428**  **OE-7** | **OE-2**  **[9:00 – 10:15]** | | **OE-3**  **[10:35 – 11:50]** | | **DE (T)**  **OE (T)** | **MTH423 (L)** | | | **MTH401 (L)** | |
| **9th / PG** | **PG-1**  **MTH515** | **PG-5** | | **PG-6** | | **PG (T)**  **MTH413 (T)**  **MTH517 (T)** | **PG (T)**  **MTH201 (T)**  **MTH415 (T)** | **PG-12a** | | |  | | **PG-13a**  **[17:10 – 18:25]** |

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|  | **3rd Semester UG Courses** |
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|  | **5th Semester UG Courses** |
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|  | **3rd and 5th Semester UG Courses** |
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|  | **7th Semester UG Courses** |
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|  | **5th and 7th Semester UG Courses** |
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|  | **1st and 3rd Semester M.S and Ph.D Courses (PG-1 to PG-9, PG-13)** |
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|  | **3rd Semester M.S and Ph.D Courses only (PG-10 to PG-12)** |

**DE, OE and PG courses to be scheduled by the Department in the respective slots provided and strictly as per given instructions.**

**Odd Semester: Slot Assignments**

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| OE-1: SE-1 | Lec. MWF17:00; |
| OE-2 / DE: | Lec. WF9:00 – 10:15; |
| OE-3 / DE: | Lec. WF10:35 – 11:50; |
| OE-4: | Lec. MTh14:00 – 15:15; |
| OE-5: | Lec. M15:35 – 16:50, T14:00 – 15:15; |
| OE-6: | Lec. WF15:35 – 16:50; |
| OE-7: SE-2 | Lec. MF8:00, T9:00; |
| OE (T): | Tut. WF12:00; WF14:00; TTh17:10 |
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| DE-1: | Lec. MTh9:00 – 10:15; |
| DE-2: | Lec. MTh10:35 – 11:50 |
| DE-3: | Lec. MTh12:00 – 13:15 |
| DE-4: | Lec. MTh14:00 – 15:15; |
| DE-5: | Lec. M15:35 – 16:50, T14:00 – 15:15; |
| DE-6: | Lec. WF15:35 – 16:50; |
| DE-7: | Lec. MF8:00, T9:00; |
| DE (T): | Tut. WF12:00; WF14:00; TTh17:10 |

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| PG-1: | Lec. MF8:00, T9:00; |
| PG-2a: | Lec. MTTh10:00 |
| PG-3a: | Lec. MTTh11:00 |
| PG-4: | Lec. MTh12:00 – 13:15 |
| PG-5: | Lec. WF9:00 – 10:15; |
| PG-6: | Lec. WF10:35 – 11:50; |
| PG-7a: | Lec. MTTh14:00 |
| PG-8a: | Lec. MTTh15:00 |
| PG-9a: | Lec. MTTh16:00 |
| PG-10: | Lec. TWTh8:00 |
| PG-11a: | Lec. MTh10:00, T12:00 |
| PG-12a: | Lec. M1710, WF15:00 |
| PG-13a: | Lec. WF17:10 – 18:25 |
| PG (T): | Tut. WF12:00; WF14:00; TTh17:10 |
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| PG LAB.: | MTWThF14:00 – 17:50; |

OE: Open Elective/Minor Course Slots;

OE (T): Open Elective Tutorial Slots;

DE: UG Departmental Elective Slots;

DE (T): Departmental Elective Tutorial Slots;

PG: PG Slots;

PG(T): PG Slots that can be used for PG tutorials

HSS-II: Humanities Courses;

PG LAB.: PG Laboratory Slots;

**Department of Mathematics: Schedule of Odd Semester Courses**

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| **UG Compulsory Courses (D)** | | | | | | | | |
| **S. No.** | **Course No.** | **L-T-P-A**  **(Units)** | **Course Title** | **Instructor** | **Slot** | **Schedule** | | |
| **Lecture** | **Tutorial** | **Laboratory** |
| **1.** | **MTH204** | **3-1-0-0 (11)** | **Abstract Algebra** |  | **3-2** | **MWF17:10** | **T17:10** | **--** |
| **2.** | **MTH301** | **3-1-0-0 (11)** | **Analysis-I** |  | **3-1** | **MWF12:00** | **Th12:00** | **--** |
| **3.** | **MTH305** | **3-1-0-0 (11)** | **Several Variable Calculus and Differential Geometry** |  | **ESO/SO-3** | **MWF11:00** | **Th11:00** | **--** |
| **4.** | **MTH403** | **3-1-0-0 (11)** | **Complex Analysis** |  | **SLOT-2** | **MF8:00, T9:00** | **W15:00** | **--** |
| **5.** | **MTH401** | **3-0-0-0 (09)** | **Theory of Computation** |  | **SLOT-3** | **WF16:00, T12:00** | **--** | **--** |
| **6.** | **MTH423** | **3-1-0-0 (11)** | **Introduction to Continuum Mechanics** |  | **SLOT-1** | **TWTh8:00** | **F15:00** | **--** |
| **7.** | **MTHxxx** | **0-0-2-0 (02)** | **Mathematical Communication Skills** |  | **SLOT-7** | **--** | **--** | **T10:00** |

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| **UG Departmental Electives (DE)**  **List all Courses [OE and PG (including M.Sc) courses declared as Departmental Electives]** | | | | | | |
| **S. No.** | **Course No.** | **L-T-P-A**  **(Units)** | **Course Title** | **Instructor** | **Slot** | **Tutorial** |
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**Department of Mathematics: Schedule of Odd Semester Courses**

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| **UG Open Electives (OE)**  **List All Courses [D, DE and PG (including M.Sc) Courses] Declared as Open Elective** | | | | | | |
| **S. No.** | **Course No.** | **L-T-P-A**  **(Units)** | **Course Title** | **Instructor** | **Slot** | **Tutorial** |
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| **UG Minors**  **List All Courses [D, DE, OE and PG (including M.Sc) courses] Declared as Minor** | | | | | | |
| **S. No.** | **Course No.** | **L-T-P-A**  **(Units)** | **Course Title** | **Instructor** | **Slot** | **Tutorial** |
| **1** | **MTH428** | **3-1-0-0**  **(11)** |  |  | **OE-7** | **W14:00** |
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**Department of Mathematics: Schedule of Odd Semester Courses**

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| **PG Courses**  **[List all PG (including M.Sc) courses, including those declared DE, OE or part of minor]** | | | | | | |
| **S. No.** | **Course No.** | **L-T-P-A**  **(Units)** | **Course Title** | **Instructor** | **Slot** | **Tutorial** |
| **1** | **MTH409** | **3-0-1-0**  **(10)** | **Comp. Programming and Data Structures** |  | **PG-3a** | **--** |
| **2** | **MTH413** | **3-1-0-0**  **(11)** | **Real and Complex Analysis** |  | **PG-7a** | **F12:00** |
| **3** | **MTH415** | **3-1-0-0**  **(11)** | **Matrix Theory & Linear Estimation** |  | **PG-8a** | **F14:00** |
| **4** | **MTH417** | **3-1-0-0**  **(11)** | **Sampling Theory** |  | **PG-9a** | **W14:00** |
| **5** | **MTH201** | **3-1-0-0**  **(11)** | **Linear Algebra** |  | **PG-2a** | **F14:00** |
| **6** | **MTH428** | **3-1-0-0**  **(11)** | **Mathematical Methods** |  | **OE-7** | **W14:00** |
| **7** | **MTH511** | **3-1-0-0**  **(11)** | **Statistical Simulations & Data Analysis** |  | **PG-3a** | **W12:00** |
| **8** | **MTH515** | **3-1-0-0**  **(11)** | **Inference – II** |  | **PG-1** | **W14:00** |
| **9** | **MTH517** | **3-1-0-0**  **(11)** | **Time Series Analysis** |  | **PG-2a** | **F12:00** |
| **10** | **MTH405** | **3-1-0-0**  **(11)** | **Functional Analysis** |  | **PG-3a** | **W14:00** |
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**Department of Mathematics: Schedule of Odd Semester Courses**

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| **PG Courses**  **[List all PG (including M.Sc) courses, including those declared DE, OE or part of minor]** | | | | | | | | |
| **S. No.** | **Course No.** | **L-T-P-A**  **(Units)** | **Course Title** | | **Instructor** | **Slot** | | **Tutorial** |
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| **PG Laboratory** | | | | | | | | |
| **S. No.** | **Course No.** | **L-T-P-A**  **(Units)** | **Course Title** | **Instructor** | | | **Laboratory**  **Schedule** | |
| **1** | **MTH409** | **3-0-1-0**  **(10)** | **Comp. Programming and Data Structures** |  | | | **Th17:10** | |
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**General Instructions:**

The timings of UG compulsory, some UG elective (DE/OE/Minor courses) and some PG (including M.Sc/MS) courses are fixed and cannot be changed by the department

Other courses being offered by the department may be scheduled only in the slots provided for this purpose, after due consideration to the schedules of the fixed courses.

The forms above should be filled before pre-registration for a semester and submitted to the OARS office. The information provided will be transferred to OARS before the pre-registration date.

No course shall be scheduled except in the slots provided. A course for which no slot is specified or a course which is not scheduled appropriately in a slot will not be listed in OARS. **This is absolutely essential to ensure that mid semester and end semester examination time tables can be generated based on the time table.**

**Instructions for Scheduling DE Courses**

1. All declared DE (departmental elective) courses (including PG courses declared as DE) must be scheduled preferably in DE-1, DE-2 and DE-3 slots.
2. If indicated in the departmental time table, slots DE-4 to DE-11 may also be used for scheduling DE courses.
3. DE courses may also be scheduled in OE-2 and OE-3 slots. However, this must be avoided as far as possible.
4. If required, a department may schedule more than one DE course in each of the assigned DE slots.
5. All declared DE courses must be scheduled as above, **unless it has also been declared an OE\* or part of a minor**.
6. If allowed by the department, students may also take departmental courses not declared as DE to fulfill the departmental elective requirements. Such courses need not necessarily be scheduled in the DE slots.

**Instructions for Scheduling OE or Minor Courses**

All UG or PG courses (other than UG core and ESO/SO courses) **which have been declared an OE or part of a minor**, by the department must be scheduled preferably in the OE-1 – OE-3 slots of the time table. OE-4 to OE-11 may be used as a second preference if so indicated in the time table. OE/Minor courses include the following type of courses,

* **Departmental UG Compulsory Course (D)** which has also been declared an OE or part of a minor.
* **Departmental PG Course (PG)** which has also been declared an OE or part of a minor.
* **Departmental UG Elective course (DE)** which has also been declared an OE or part of a minor.
* **Departmental UG Course which is not a D or DE** butwhich has been declared an OE or part of a minor.

**\*OE or Minor:** These are courses for which it has been declared that students from other departments can register.

(*Students from other departments can also register in courses which have* ***not*** *been declared as OE with the consent of the instructor. Such courses (which have not been declared as OE) need not be scheduled in the OE slot*).

**Instructions for Scheduling PG Courses**

1. PG courses declared as OE or part of a minor to be scheduled in OE slot.
2. PG courses declared as DE must be scheduled in DE slot unless also declared OE or part of a minor.

Other PG courses must be scheduled as follows,

* For the benefit of dual degree students, 1st year M. Tech./M.Sc/MS courses must be scheduled only in the specific PG slots indicated for this purpose in the time table.
* Other PG courses can be scheduled in all indicated PG slots in the time table.
* PG laboratories must be scheduled only in the slots indicated in the time table.
* If required, more than 1 PG course/lab may be scheduled in each PG slot.

**Update on 28-Mar-13**