

# Programme Schedule for Master's Programme in Engineering Mathematics, 120 credits

Programme code: AMM04

## Valid for the academic year 2024/2025

#### About the programme schedule

Every degree programme has an established programme syllabus in which all the courses included in the programme appear, divided up by academic year. The programme syllabus is supplemented annually with a programme schedule stating in which term and study period a programme course is run, in which city it takes place, if it collides with another course, and so on. The programme schedule is valid for one year at a time.

K1, K2 etc. in the study period columns indicate timetable positions and show whether the courses collide or not. Courses with the same K-value collide; courses with different K-values do not collide. Courses with the value "X" can collide with other courses in the study period. "E" indicates that the course is given in Eskilstuna and "V" that it is given in Västerås.

In the column "Overlapping courses" is indicated courses that wholly or partly overlap with the current course on that row. If you have read overlapping courses you may only be accredited with overlapping credits once in a degree. Contact your Study Adviser for more information.



### Level and Classification of Progressive Specialisation

The University uses the following designations for the classification of progressive specialisation, where "G" indicates that the course belongs to a programme at first-cycle level and "A" that the course belongs to second-cycle level:

| G1N              | course with only upper secondary school entry requirements   |
|------------------|--|
| G1F              | course with less than 60-credit course/courses at first-cycle level as entry requirements  |
| G1E              | course including a specially-designed degree project for a higher education diploma  |
| G2F              | course with at least 60-credit course/courses at first-cycle level as entry requirements   |
| G2E              | course with at least 60-credit course/courses at first-cycle level as entry requirements and which includes a degree project for a Bachelor's degree |
| GXX              | course which cannot be classified according to the above model   |
| A1N              | course with only course/courses at first-cycle level as entry requirements   |
| A1F              | course with course/courses at second-cycle level as entry requirements   |
| A <sub>1</sub> E | course which includes a degree project for a Master's degree (60 credits)  |
| A <sub>2</sub> E | course which includes a degree project for a Master's degree (120 credits)   |
| AXX              | course which cannot be classified according to the above model   |

#### Choice within the programme

For every student, an individual study plan will be written in conjunction with the programme coordinator

To be able to be admitted to a course you must always fulfil the specific eligibility requirements which are stated in the course syllabus, regardless of whether you have a guaranteed place or not.

#### Other information

Depending on the number of applicants for the individual courses, courses may be cancelled.

The language of instruction is English.



### Terms 1 and 2 for programmes starting in autumn term 2024 (AMM04)

| Level/<br>Specialisation | Application code | Course code | Title/Course name                        | Credits | City | Rate of study | AT<br>1a | AT<br>1b | AT<br>2a   | AT<br>2b   | ST<br>3a   | ST<br>3b   | ST<br>4a | ST<br>4b | Overlapping courses |
|--------------------------|------------------|-------------|--|---------|------|---------------|----------|----------|------------|------------|------------|------------|----------|----------|---------------------|
| A1N                      | 21192            | MAA516      | Multivariate Statistical<br>Analysis     | 7,5     | V    | 50            | K4       | К4       |            |            |            |            |          |          | MAA508,<br>MAA510   |
| G2F                      | 21191            | MAA323      | Fourier Analysis                         | 7,5     | V    | 50            | K1       | K1       |            |            |            |            |          |          |                     |
| A1N                      | 21156            | MAA704      | Applied Matrix Analysis                  | 7,5     | V    | 50            |          |          | K4,<br>K5a | K4,<br>K5a |            |            |          |          |                     |
| A1N                      | 21170            | MMA500      | Discrete Mathematics, a<br>Second Course | 7,5     | V    | 50            |          |          | K2         | K2         |            |            |          |          |                     |
| G1F                      | 11294            | MAA042      | Numerical methods with MATLAB            | 7,5     | V    | 50            |          |          |            |            | K1,<br>K5b | K1,<br>K5b |          |          |                     |
| A1N                      | 11119            | MAA507      | Mathematics of Internet                  | 7,5     | V    | 50            |          |          |            |            | К3         | К3         |          |          |                     |
| G2F                      | 11108            | MAA315      | Operations Research                      | 7,5     | V    | 50            |          |          |            |            | K4,<br>K5a | K4,<br>K5a |          |          | MMA515              |
| A1N                      | 11120            | MAA600      | Graph Theory, Networks and applications  | 7,5     | V    | 50            |          |          |            |            | K1         | K1         |          |          |                     |
| A1N                      | 11137            | MMA503      | Foundations of Real Analysis             | 7,5     | V    | 50            |          |          |            |            | K2         | K2         |          |          |                     |
| A1E                      | 11201            | MAA045      | Master's Degree Project in Mathematics   | 15      | V    | 50            |          |          |            |            | Х          | Х          | Х        | Х        |                     |
| G1F                      | 11203            | MMA291      | Project in Mathematics                   | 7,5     | V    | 25            |          |          |            |            | Х          | Х          | Х        | Х        |                     |
| G2F                      | 11106            | MAA313      | Simulation                               | 7,5     | V    | 50            |          |          |            |            |            |            | K2       | К2       | MMA703              |
| A1N                      | 11110            | MAA513      | Computational complexity                 | 7,5     | V    | 50            |          |          |            |            |            |            | K4       | K4       |                     |



### Term 3 and 4 for programmes started in autumn term 2023 (AMM04)

| Level/<br>Specialisation | Application code | Course code | Title/Course name                            | Credits | City | Rate of study | AT<br>1a | AT<br>1b | AT<br>2a | AT<br>2b | ST<br>3a | ST<br>3b | ST<br>4a | ST<br>4b | Overlapping courses |
|--------------------------|------------------|-------------|--|---------|------|---------------|----------|----------|----------|----------|----------|----------|----------|----------|---------------------|
| A1F                      | 21118            | MAA517      | Numerical Linear Algebra                     | 7,5     | V    | 50            | К3       | К3       |          |          |          |          |          |          |                     |
| A1N                      | 21115            | MAA512      | Data analysis, clustering and classification | 7,5     | V    | 50            | K2       | K2       |          |          |          |          |          |          |                     |
| A1N                      | 21153            | MAA700      | Optimization                                 | 7,5     | V    | 50            |          |          | K2       | K2       |          |          |          |          | MAA703              |
| A1N                      | 21171            | MMA501      | Abstract Algebra                             | 7,5     | V    | 50            |          |          | К3       | K3       |          |          |          |          |                     |
| A2E                      | 11200            | MAA044      | Master's Degree Project in Mathematics       | 30      | V    | 100           |          |          |          |          | Х        | Х        | Х        | Х        |                     |