

## **Programme Schedule for Master's programme in Software Engineering, 120 credits**

Programme code: ZCS24

### **Valid for the academic year 2024/2025**

#### **About the programme schedule**

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

Courses which belong to the main field of study for a degree have been marked with "X" in the column MF.

K1, K2 etc. in the study period columns indicate their timetable positions and show whether the courses collide or not. Courses with the same K value collide, and courses with different K values do not collide. Courses with the value "X" can collide with other courses in the study period.

The following applies to current collision codes/K values:

K1 = Monday pm + Wednesday am

K2 = Monday am + Thursday am

K3 = Tuesday am + Thursday pm

K4 = Tuesday pm + Friday am

K5 = Wednesday pm + Friday pm (K5a = Wednesday pm, K5b = Friday pm)

The program schedule shows the courses that you have a guaranteed place to for the particular study period and programme semester. "E" indicates that the course is given in Eskilstuna and "V" that it is given in Västerås.

The course syllabus will give information if the course is overlapping another course. You can only use overlapping credits once in a degree. Please 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 |
| 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   |
| A1E | course which includes a degree project for a Master’s degree (60 credits)  |
| A2E | course which includes a degree project for a Master’s degree (120 credits)   |

### **Choice within the programme**

During the course of your education, you can be given the possibility of choosing courses within the programme. You will make your choices together with your program coordinator.

When you make your choices, you must always base these on the programme syllabus together with the degree requirements for the degree you wish to obtain. Please contact your Program coordinator or Study Adviser for more information.

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 courses are given in English.

**Semester 1 and 2 for programme starting in autumn semester 2024**

| MF | Main Field /Course name                            | Course code | Level | Credits | Study periods |    |     |    |     |    |     |     | Speed | City |
|----|--|-------------|-------|---------|---------------|----|-----|----|-----|----|-----|-----|-------|------|
|    |  |             |       |         | HT1           |    | HT2 |    | VT1 |    | VT2 |     |       |      |
|    |  |             |       |         | a             | b  | a   | b  | a   | b  | a   | b   |       |      |
|    | <b>Computer Science</b>                            |             |       |         |               |    |     |    |     |    |     |     |       |      |
| X  | Software Engineering 1: Basic Course               | DVA332      | G2F   | 7,5     | K1            | K1 |     |    |     |    |     | 50% | V     |      |
| X  | Research methods in computer science               | DVA463      | A1N   | 7,5     | K3            | K3 |     |    |     |    |     | 50% | V     |      |
| X  | Software Verification and Validation *             | CDT414      | A1N   | 7,5     |               |    | K3  | K3 |     |    |     | 50% | V     |      |
| X  | Software Engineering 2: Project teamwork           | DVA313      | G2F   | 7,5     |               |    | K1  | K1 |     |    |     | 50% | V     |      |
| X  | Software Architecture *                            | DVA506      | A1N   | 7,5     |               |    |     |    | K1  | K1 |     | 50% | V     |      |
| X  | Model-Driven Engineering *                         | DVA436      | A1N   | 7,5     |               |    |     |    |     |    | K2  | K2  | 50%   | V    |
| X  | Software Development for Real-Time Systems *       | DVA455      | A1N   | 7,5     |               |    |     |    |     |    | K4  | K4  | 50%   | V    |
|    |  |             |       |         |               |    |     |    |     |    |     |     |       |      |
|    | <b>Mathematics/Applied Mathematics<sup>1</sup></b> |             |       |         |               |    |     |    |     |    |     |     |       |      |
|    | Mathematics of Internet                            | MAA507      | A1N   | 7,5     |               |    |     |    | K3  | K3 |     | 50% | V     |      |

**Semester 1 and 2 for programme starting in autumn semester 2024 aiming for 1-year master**

| MF | Main Field /Course name   | Course code | Level | Credits | Study periods |    |     |    |     |    |     |     | Speed | City |
|----|---|-------------|-------|---------|---------------|----|-----|----|-----|----|-----|-----|-------|------|
|    |   |             |       |         | HT1           |    | HT2 |    | VT1 |    | VT2 |     |       |      |
|    |   |             |       |         | a             | b  | a   | b  | a   | b  | a   | b   |       |      |
|    | <b>Computer Science</b>   |             |       |         |               |    |     |    |     |    |     |     |       |      |
| X  | Software Engineering 1: Basic Course  | DVA332      | G2F   | 7,5     | K1            | K1 |     |    |     |    |     | 50% | V     |      |
| X  | Research methods in computer science  | DVA463      | A1N   | 7,5     | K3            | K3 |     |    |     |    |     | 50% | V     |      |
| X  | Software Verification and Validation *  | CDT414      | A1N   | 7,5     |               |    | K3  | K3 |     |    |     | 50% | V     |      |
| X  | Safety Critical Systems Engineering *   | DVA437      | A1N   | 7,5     |               |    | K2  | K2 |     |    |     | 50% | V     |      |
| X  | Thesis for the Degree of Master of Science (60 credits) in Computer Science with Specialization in Software Engineering * | DVA423      | A1E   | 15      |               |    |     |    | X   | >  | >   | >   | 50%   | V    |
| X  | Model-Driven Engineering *  | DVA436      | A1N   | 7,5     |               |    |     |    |     |    | K2  | K2  | 50%   | V    |
|    |   |             |       |         |               |    |     |    |     |    |     |     |       |      |
|    | <b>Mathematics/Applied Mathematics<sup>1</sup></b>  |             |       |         |               |    |     |    |     |    |     |     |       |      |
|    | Mathematics of Internet   | MAA507      | A1N   | 7,5     |               |    |     |    | K3  | K3 |     | 50% | V     |      |

**Semester 3 and 4 for programme started in autumn semester 2023**

| MF | Main Field /Course name  | Course code | Level | Credits | Study periods |    |     |    |     |   |     |   | Speed | City |
|----|--|-------------|-------|---------|---------------|----|-----|----|-----|---|-----|---|-------|------|
|    |  |             |       |         | HT1           |    | HT2 |    | VT1 |   | VT2 |   |       |      |
|    |  |             |       |         | a             | b  | a   | b  | a   | b | a   | b |       |      |
|    | <b>Computer Science</b>  |             |       |         |               |    |     |    |     |   |     |   |       |      |
| X  | Distributed Software Development *   | CDT402      | A1N   | 7,5     | K4            | K4 | K4  | K4 |     |   |     |   | 25%   | V    |
| X  | Industrial Systems in Cloud Computing *  | DVA500      | A1N   | 7,5     | K5            | K5 |     |    |     |   |     |   | 50%   | V    |
| X  | Web security*  | DVA489      | A1N   | 7,5     | K2            | K2 | K5  | K5 |     |   |     |   | 25%   | V    |
| X  | Safety Critical Systems Engineering *  | DVA437      | A1N   | 7,5     |               |    | K2  | K2 |     |   |     |   | 50%   | V    |
| X  | Thesis for the Degree of Master of Science (120 credits) in Computer Science with Specialization in Software Engineering * | DVA501      | A2E   | 30      |               |    |     |    | X   | > | >   | > | 100%  | V    |

\*) This is a course at advanced level within the specialization in Software Engineering.

<sup>i</sup> The degree requirements include 7,5 credits in mathematics at level G1F or higher. For the 1-year master's degree, students who have completed at least 30 ECTS credits in mathematics in their previous studies, can take an additional engineering course instead of the math course.