

Mathematical Statistics

| Course Code | Credits | Cycle | Programme | Language | | Course Name | Links | | 10/11 sp4 |
|------------------------|---------|-------|---|-------------|----|--|----------|---------------------------|--------------------------|
| | | | | S.Ex. stud. | | | Footnote | | |
| FMS180 | 6 | G2 | C, D, E, F, I, Pi | - | S | Markov Processes | | KS KE U W | |
| FMS086 | 7.5 | G2 | B, K, N | - | S | Mathematical Statistics | | KS KE U W | |
| FMS140 | 7.5 | G2 | W | - | S | Mathematical Statistics, Basic Course | | KS KE U W | |
| FMSF10 | 7.5 | G2 | C, D, E, F, I, L, M, MWIR | X | E1 | Stationary Stochastic Processes | X | KS KE U W | |
| FMS150 | 7.5 | A | C, D, E, F, Pi | X | E2 | Statistical Image Analysis | | KS KE U W | |
| FMS065 | 7.5 | G2 | C, Pi, RH | - | E2 | Statistical Methods for Safety Analysis | | KS KE U W | |
| FMS065 | | | V | | | | | | <i>Examinations only</i> |
| FMS012 | 9 | G2 | I | - | S | Mathematical Statistics, Basic Course | | KS KE U W | |
| FMS012 | | | C, D | | | | | | |
| FMS012 | | | E | | | | | | |
| FMS012 | | | Pi | | | | | | |
| FMS012 | | | F | | | | | | 1 |
| FMS110 | 7.5 | A | D, E, I, Pi | X | E1 | Non-Linear Time Series Analysis | | KS KE U W | |
| FMS161 | 7.5 | A | D, E, I, Pi | X | E1 | Financial Statistics | | KS KE U W | |
| FMSF01 | 3 | G2 | V | - | S | Mathematical Statistics | X | KS KE U W | |
| FMS032 | 7.5 | G2 | L, Y | - | S | Mathematical Statistics, Basic Course | | KS KE U W | |
| FMS051 | 7.5 | A | C, D, E, F, I, Pi | X | E2 | Mathematical Statistics, Time Series Analysis | | KS KE U W | |
| FMSN10 | 7.5 | A | E, Pi | X | E1 | Survival Analysis | | KS KE U W | |
| FMS091 | 7.5 | A | D, E, I, Pi | X | E2 | Monte Carlo and Empirical Methods for Stochastic Inference | | KS KE U W | |
| FMSF05 | 7.5 | G2 | E, I, Pi | - | E2 | Probability Theory | | KS KE U W | |
| FMS072 | 7.5 | G2 | D, E, F, MWIR, N, Pi, W | X | E2 | Design of Experiments | | KS KE U W | 1 |
| FMSN05 | 3 | A | Pi | X | E | International Project Course-Mathematical Modelling | X | KS KE U W | 1 |

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| | | | | | | | | | | |
| FMS035 | 7.5 | G2 | M | | - | S | Mathematical Statistics, Basic Course | | KS KE U W | 1 |
| FMS045 | 6 | G2 | C , D , E , F , I , Pi | | - | S | Stationary Stochastic Processes | X | KS KE U W | 1 |
| FMS047 | 3 | A | D , I , Pi | | - | S | Stationary Stochastic Processes, Project Work | X | KS KE U W | 1 |
| FMS155 | 7.5 | A | D , E , I , Pi , RH | | X | E2 | Statistical Modelling of Extreme Values | | KS KE U W | 1 |

[FMSF10](#) ([C](#), [D](#), [E](#), [I](#)) Stationary Stochastic Processes: Endast en av kurserna [FMS045](#) och [FMSF10](#) får ingå i examen.

[FMSF01](#) ([V](#)) Mathematical Statistics: Kursen kan endast ingå i avkortad CIV.

[FMSN05](#) ([Pi](#)) International Project Course-Mathematical Modelling: Begränsat deltagarantal. Spec. ansökningsförfarande. Kursen går inte i läsperioden utan i augusti.

[FMS045](#) ([C](#), [D](#), [E](#)) Stationary Stochastic Processes: Endast en av kurserna [FMS045](#) och [FMSF10](#) får ingå i examen.

[FMS045](#) ([I](#)) Stationary Stochastic Processes: Kursen är obligatorisk i teknikprofilen Matematisk modellering för antagna H08. Kursen är också valfri på programmet.

[FMS047](#) ([I](#)) Stationary Stochastic Processes, Project Work: Kursen är obligatorisk i teknikprofilen Matematisk modellering för antagna H08. Kursen är också valfri på programmet.

Mathematics

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|------------------------|---------|-------|--|-------------|----|---|---------------------------|-------|--------------|
| | | | | S.Ex. stud. | | | | | |
| FMA430 | 6 | G1 | B, BI, K, L, N, V | - | S | Calculus in Several Variables | KS KE U W | | |
| FMA430 | | | C, D | | | | | | |
| FMA430 | | | E, I | | | | | | |
| FMA430 | | | E, M, MD, W | | | | | | 1 |
| FMA170 | 6 | A | C, D, E, F, L, Pi | X | E2 | Image Analysis | KS KE U W | | |
| FMA661 | 7.5 | G2 | IDA | - | S | Probability Theory and Discrete Mathematics | KS KE U W | | |
| FMA415 | 16.5 | G1 | BI | - | S | Calculus in One Variable | KS KE U W | | |
| FMAA05 | 15 | G1 | E, F, I, L, Pi, V, W | - | S | Calculus in One Variable | KS KE U W | | |
| FMA260 | 7.5 | A | D, E, Pi | X | E2 | Functional Analysis and Harmonic Analysis | KS KE U W | | |
| FMA140 | 6 | A | D, E, I, Pi | X | E2 | Non-Linear Dynamical Systems | KS KE U W | | |
| FMA645 | 13.5 | G1 | IBYA, IBYI, IBYV, IDA, IEA | - | S | Calculus | KS KE U W | | |
| FMAA01 | 15 | G1 | C, D, M, MD | - | S | Calculus in One Variable | KS KE U W | | |
| FMAA01 | | | B, K, N | | | | | | 1 |
| FMA085 | 4.5 | G1 | Pi | - | S | Mathematical Communication | KS KE U W | | 1 |
| FMA175 | 3 | A | C, D, E, F, Pi | X | E1 | Image Analysis, Project | KS KE U W | | |
| FMA420 | 6 | G1 | C, Pi, W | - | S | Linear Algebra | KS KE U W | | |
| FMA420 | | | B, E, I, K, N | | | | | | |
| FMA420 | | | BI, E, L, V | | | | | | |
| FMA420 | | | D | | | | | | 1 |

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| FMA045 | 4.5 | G1 | Pi | - | S | Mathematical Modelling | | KS KE U W | |
| FMA145 | 3 | A | D, E, I, Pi | X | E1 | Non-linear Dynamical Systems, Project | | KS KE U W | |
| FMA051 | 6 | A | D, E, E, I, Pi | X | E1 | Optimization | X | KS KE U W | |
| FMA135 | 6 | G1 | C, D, E, F, Pi | X | E2 | Geometry | | KS KE U W | |
| FMA421 | 9 | G1 | M, MD | - | S | Linear Algebra with Scientific Computation | | KS KE U W | |
| FMA250 | 7.5 | A | D, E, Pi | X | E2 | Partial Differential Equations with Distribution Theory | | KS KE U W | |
| FMAF10 | 5 | G2 | B, C, D, K, L, M, W | - | S | Applied Mathematics - Linear systems | X | KS KE U W | |
| FMA270 | 6 | A | C, D, E, E, Pi | X | E2 | Computer Vision | | KS KE U W | |
| FMA240 | 6 | G2 | D, E, E, I, Pi | X | E2 | Linear and Combinatorial Optimization | | KS KE U W | |
| FMA111 | 6 | A | D, E, Pi | - | S | Mathematical Structures | | KS KE U W | |
| FMAF01 | 7 | G2 | E, N, Pi | - | S | Mathematics - Analytic Functions | | KS KE U W | |
| FMAF01 | | | C, D, E, I | | | | X | | |
| FMA190 | 6 | A | C, D, E, E, Pi | X | E2 | Algebra | X | KS KE U W | 1 |
| FMA021 | 7.5 | A | E, E, M, Pi | - | S | Applied Mathematics | | KS KE U W | 1 |
| FMAN01 | 7.5 | A | E, E, Pi, W | X | E2 | Biomathematics | | KS KE U W | 1 |
| FMA435 | 7.5 | G1 | Pi | - | S | Calculus in Several Variables | | KS KE U W | 1 |

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| EMA200 | 6 | A | D, E, E, Pi | X | E2 | Calculus of Variations | X | KS KE U W | 1 | |
| EMA120 | 6 | A | C, D, E, E, I | X | E1 | Matrix Theory | | KS KE U W | 1 | |
| EMA120 | | | Pi | | | | | | | |
| EMAF15 | 7.5 | G2 | M, W | - | S | Applied Mathematics - Partial Differential Equations | | KS KE U W | 1 | |
| EMA023 | 3 | A | E, Pi | - | E1 | Applied Mathematics, Project | X | KS KE U W | 1 | |
| EMA272 | 3 | A | C, D, E, E, Pi | X | E1 | Computer Vision, Project | | KS KE U W | 1 | |
| EMA091 | 6 | G1 | C, D, E, E, Pi | - | S | Discrete Mathematics | | KS KE U W | 1 | |
| EMAF05 | 7 | G2 | E, N, Pi | - | S | Mathematics - Systems and Transforms | | KS KE U W | | |
| EMAF05 | | | C, D, E, I | | | | X | | 1 | |

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| FMA656 | 4.5 | G1 | IBYA , IBYL , IBYV , IDA , IEA | - | S | Mathematics, Linear Algebra | | KS KE U W | 1 |
| FMA125 | 3 | A | D , E , F | - | E1 | Matrix Theory, Project | | KS KE U W | 1 |
| FMA125 | | | Pi | | | | | | |

[FMA051](#) (I) Optimization: *Kursen är obligatorisk i teknikprofilen Matematisk modellering för antagna H08. Kursen är också valfri på programmet.*

[FMAF10](#) (C) Applied Mathematics - Linear systems: *Endast en av kurserna [FMAF05](#) och [FMAF10](#) får ingå i examen.*

[FMAF10](#) (D) Applied Mathematics - Linear systems: *Kan bytas mot kurserna [FMAF01](#) samt [FMAF05](#) (Båda måste läsas). Kontakta studievägledare för mer information. Kurserna [FMAF10](#) och [FMAF05](#) kan inte samtidigt ingå i examen.*

[FMAF01](#) (D) Mathematics - Analytic Functions: *Kan tillsammans med [FMAF05](#) läsas i stället för [FMAF10](#). Kontakta programledare eller studievägledare för mer information. Ges också som valfri kurs i årskurs 4.*

[FMA190](#) (E) Algebra: *Kursen ges vartannat läsår.*

[FMA200](#) (E) Calculus of Variations: *Kursen ges vartannat läsår.*

[FMA023](#) (E, Pi) Applied Mathematics, Project: *Kursen fortsätter med ett redovisningstillfälle hösten 2010.*

[FMAF05](#) (C) Mathematics - Systems and Transforms: *Endast en av kurserna [FMAF05](#) och [FMAF10](#) får ingå i examen.*

[FMAF05](#) (D) Mathematics - Systems and Transforms: *Kan tillsammans med [FMAF01](#) läsas i stället för [FMAF10](#). Kontakta programledare eller studievägledare för mer information. Endast en av kurserna [FMAF05](#) och [FMAF10](#) får ingå i examen.*

Numerical Analysis

| Course Code | Credits | Cycle | Programme | S.Ex. stud. | Language | | Course Name | Footnote | Links | |
|------------------------|---------|-------|----------------------------|-------------|----------|--|--|----------|---|---|
| | | | | | | | | | | |
| FMNN01 | 7.5 | A | E, Pi | X | E | | Numerical Linear Algebra | | KS KE U W | |
| FMN100 | 6 | A | C, D, E, F | X | E1 | | Numerical Methods in CAGD | | KS KE U W | |
| FMNN05 | 7.5 | A | D, E, Pi | X | E1 | | Simulation Tools | | KS KE U W | |
| FMN091 | 7.5 | A | E, Pi | X | E1 | | Finite Volume Methods | X | KS KE U W | |
| FMNN10 | 8 | A | E, I, Pi | X | E1 | | Numerical Methods for Differential Equations | | KS KE U W | |
| FMN140 | 6 | G2 | V | - | S | | Scientific Computing | | KS KE U W | |
| FMNN15 | 4 | A | E, Pi | X | E1 | | Multigrid Methods for Differential Equations | | KS KE U | |
| FMN011 | 6 | G2 | C, D | X | E1 | | Numerical Analysis | | KS KE U W | 1 |
| FMN050 | 6 | G2 | E, I | X | E1 | | Numerical Analysis | X | KS KE U W | 1 |
| FMNF01 | 7.5 | G2 | M | X | E1 | | Numerical Analysis | | KS KE U W | 1 |

[FMN091](#) (E, Pi) Finite Volume Methods: *Kursen ges vartannat läsår.*

[FMN050](#) (I) Numerical Analysis: *Kursen är obligatorisk i teknikprofilen Matematisk modellering för antagna H08. Kursen är också valfri på programmet.*

Degree Projects of the Department

The list contains the degree projects which are given by the department and which programme each degree project is included in.

Links

| Course Code | Credits | Programme | Course Name | Links |
|-------------|---------|---|---|--|
| FMS820 | 30 | C , D , E , F , I , Pi , RH | Degree Project in Mathematical Statistics for Engineers | KS U |
| FMA820 | 30 | C , D , E , F , I , M , Pi | Degree Project in Mathematics for Engineers | KS U W |
| FMN820 | 30 | D , E , F , I , M , Pi | Degree Project in Numerical Analysis | KS U W |