PhD Courses offered within the ELLIIT environment 2026

University, department	PhD course	Responsible researcher	ECTS	Time
BTH, DIPT	Personal Task Management	Michael Unterkalmsteiner	3	Spring term
BTH, DIPT	Reading and Reviewing Research Papers	Krzysztof Wnuk	3	Spring term
BTH, DIPT	Scientific Communication	Darja Smite	3	Fall term
BTH, Grants office	Research Funding	Marie Wik	3	Fall term
BTH, Library	Information Retrieval for PhD students	Eva Norling	3	Fall term
BTH, TIMN	Philosophy and Methodology of Applied Sciences	Wlodek Kulesza	7.5	Fall term
HH	Advanced transfer learning with Deep Neural Networks	Mohamed-Rafik Bouguelia	7.5	Fall term
LiU, IDA	Advanced Algorithmic Problem Solving	Fredrik Heintz	6	Spring term
LiU, IDA	Automated Planning	Jendrik Seipp	6	Spring term
LiU, IDA	Current topics in Design Research and the Public Sector	Stefan Holmlid	3	Spring term
LiU, IDA	Current Topics in Societal Safety, Security, and Crisis Management	Erik Prytz	1.5	Spring term
LiU, IDA	Deep Learning	Fredrik Lindsten	6	Spring term
LiU, IDA	Federated Learning for Wireless Communications	Eunjeong Jeong		Spring term
LiU, IDA	Reinforcement Learning	Fredrik Heintz	6	Spring term
LiU, IDA	Stochastic Differential Equations with YUIMA	Krzysztof Bartoszek	3	Spring term
LiU, IDA	Stochastic Processes	Krzysztof Bartoszek	7.5	Spring term
LiU, IDA	Theoretical Aspects of Automated Planning	Arnaud Lequen	6	Spring term
LiU, IDA	Understanding and Building Large Language Models	Fredrik Heintz	6	Spring term
LiU, CUGS	Logic II	Johannes Klaus Fichte	6	Fall term
LiU, IDA	Advanced Compiler Construction	Christoph Kessler	6	Fall term
LiU, IDA	Computing in times of extinction	Ola Leifler	6	Fall term
LiU, IDA	Critical Perspectives on AI	Tom Ziemke	6	Fall term
LiU, IDA	Current topics in Design and Public Sector (fall 2026)	Stefan Holmlid	3	Fall term
LiU, IDA	Design Creativity and Innovation	Mattias Arvola	7.5	Fall term
LiU, IDA	Neuromorphic Computing	Christoph Kessler	4	Fall term
LiU, IDA	Optimal Transport Theory for Control and Machine Learning	Sebastian Mair	6	Fall term
LiU, IDA	Recent Advances in Combinatorial Optimization	Arnaud Lequen	6	Fall term
LiU, IDA	Reinforcement Learning	José M Peña	6	Fall term
LiU, IDA	Robots and AI in Science Fiction: What can we learn for Robotics, Interaction Design and AI	Franziska Babel	7.5	Fall term
LiU, IDA	Trustworthy Machine Learning	Buse Atli	6	Fall term
LiU, IEI	Orientation to Business and Management Research	Christian Kowalkowski	4	Fall term
LiU, ISY	Multi- and Hyperspectral Imaging and Analysis	Amanda Berg	3+2	Spring term
LiU, ISY	Array and Sparse Signal Processing	Anubhab Chowdhury	6	Spring term
LiU, MAI	Graph Theory	Carl Johan Casselgren	8	Spring term
LiU, MAI	Modern Nonlinear Optimization	Chuan He	8	Spring term
LiU, MAI	Discrete Optimization	Torbjörn Larsson	6	Spring term

LiU, MAI	Computational and Bayesian Inverse Problems	Jan Glaubitz	TBD	Fall term
LiU, MAI	Network Optimization	Roghayeh Hajizadeh	TBD	Fall term
LiU, MAI	Matrix Analysis	Göran Bergqvist	8	Fall term
LiU, MAI	Probability Theory 1	Torkel Erhardsson	8	Fall term
LiU, MAI	Probability Theory 2	Torkel Erhardsson	8	Fall term
LiU, MIT	Introduction to PhD studies in Visualization technology and methodology, part 1	Niklas Rönnberg	2	Recurrent annual
LiU, MIT	Introduction to PhD studies in Visualization technology and methodology, part 2	Jonas Löwgren	2	Recurrent annual
LiU, MIT	Introduction to PhD studies in Visualization technology and methodology, part 3	Kostiantyn Kucher	2	Recurrent annual
LU, CS	Optimising Compilers	Jonas Skeppstedt	7.5	Spring term, biannual
LU, CS	Program Analysis	Christoph Reichenbach	7.5	Fall term, biannual
LU, CS	Agile Software Development	Emma Söderberg	7.5	Fall term
LU, CS	Intelligent Autonomous Systems	Volker Krueger	7.5	Fall term
LU, CS	Compilers	Görel Hedin	7.5	Fall term
LU, CS	Computer Graphics	Michael Doggett	7.5	Fall term
LU, CS	High Performance Graphics	Michael Doggett	7.5	Fall term
LU, CS	Advanced Algorithms	Susanna Rezende	7.5	Fall term
LU, CS	Applied Machine Learning	Maj Stenmark	7.5	Fall term
LU, CS	Advanced Applied Machine Learning	Erik Hellsten	7.5	Spring term
LU, CS	Language Technology	Pierre Nugues	7.5	Fall term
LU, MC	Hardy spaces	Alexandru Aleman	7.5	Spring term
LU, MC	Random Walks on Groups	Tomas Persson and Jörg Schmeling	7.5	Spring term
LU, MC	Differentialgeometri		7.5	Recurrent annual
LU, MC	Distributionsteori		7.5	Recurrent annual
LU, MC	Finita volymmetoder		7.5	Recurrent annual
LU, MC	Fördjupningskurs till integrationsteori		7.5	Recurrent annual
LU, MC	Fördjupningskurs till lineär funktionalanalys		7.5	Recurrent annual
LU, MC	Grupp- och ringteori		7.5	Recurrent annual
LU, MC	Integrationsteori		7.5	Recurrent annual
LU, MC	Lineär funktionalanalys		7.5	Recurrent annual
LU, MC	Markovprocesser (Nivå Grund 2)		7.5	Recurrent annual
LU, MC	Riemanngeometri		7.5	Recurrent annual
LU, MC	Sannolikhetsteorins matematiska grunder		7.5	Recurrent annual
LU, MC	Talteori		7.5	Recurrent annual
LU, MC	Topologi		7.5	Recurrent annual
LU, MC	Algebraiska strukturer		7.5	Spring term
LU, MC	Linjär och logistisk regression		7.5	Spring term
LU, MC	Maskininlärning		7.5	Spring term
LU, MC	Numeriska simuleringar av flödesproblem		7.5	Spring term
LU, MC	Partiella differentialekvationer		7.5	Spring term
LU, MC	Statistisk modellering av extremvärden		7.5	Spring term

LU, MC	Biomatematik		7.5	Spring term
LU, MC	Kontinuerliga system		7.5	Spring term
LU, MC	Variationskalkyl		7.5	Spring term
LU, MC	Dataanalys: statistisk inlärning och visualisering med projekt (Nivå Grund 2)		7.5	Spring term
LU, MC	Datorseende		7.5	Spring term
LU, MC	Linjär och kombinatorisk optimering		7.5	Spring term
LU, MC	Matematiska strukturer		6	Spring term
LU, MC	Monte Carlo-baserade statistiska metoder		7.5	Spring term
LU, MC	Simuleringsverktyg		7.5	Spring term
LU, MC	Stationär och icke-stationär spektralanalys		7.5	Spring term
LU, MC	Funktionalanalys och harmonisk analys		7.5	Spring term
LU, MC	Matristeori		7.5	Spring term
LU, MC	Matristeori, mindre kurs		6	Spring term
LU, MC	Olinjära dynamiska system		7.5	Spring term
LU, MC	Finansiell statistik		7.5	Fall term
LU, MC	Matematisk statistik, tidsserieanalys		7.5	Fall term
LU, MC	Medicinsk bildanalys		7.5	Fall term
LU, MC	Numeriska metoder för differentialekvationer		7.5	Fall term
LU, MC	Optimering		7.5	Fall term
LU, MC	Spatial statistik med bildanalys		7.5	Fall term
LU, MC	Avancerad kurs i numeriska algoritmer med Python/SciPy		7.5	Fall term
LU, MC	Bildanalys		7.5	Fall term
LU, MC	Numerisk linjär algebra		7.5	Fall term
LU, MC	Prissättning av derivattillgångar		7.5	Fall term
LU, RT	Linear Systems	Mark Jeeninga	9	Recurrent annual

ELLIIT
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