NTNU Trondheim
Norges teknisk-naturvitenskapelige universitet / Norwegian University of Science and Technology

SØKNAD OM FORHÅNDSGODKJENNING AV PLANLAGTE DELSTUDIER I UTLANDET / APPLICATION FOR PRE APPROVAL OF EXCHANGE PERIODS ABROAD
2. prioritet / 2nd priority
Forhåndsgodkjenningsskjemaet leveres ditt fakultet / The pre approval form is to be delivered to your faculty

1. PERSONLIGE OPPLYSNINGER / PERSONAL INFORMATION

Etternavn-fornavn-mellomnavn / Last name-first name-middle name **Bjerga, Mikael**	F.dato mnd. år / Date of birth, month year **16.01.1991**
Semesteradresse / Address Trondheim **Smørblomstvegen 44B**	Studentnr. **741429**
Postnr./sted / ZIP-code/Town **7050**	E-post **mikaelbj@stud.ntnu.no**	Telefon / Phone number **47350284**
Studieprogram / Study programme **Datateknikk (Mastergrad 5 år)**	Antall år før utreise / Number of years studied prior to departure **3**

2. FAKULTET GRADEN AVLEGGES VED / FACULTY WHERE THE DEGREE WILL BE TAKEN:

Informasjonsteknologi, matematikk og elektroteknikk

3. PLANLAGT SEMESTER FOR UTREISE TIL UTENLANDSK LÆRESTED / IN WHICH SEMESTER DO YOU PLAN TO GO ABROAD?

Høst 2015

4. HVA PLANLEGGER DU Å TA? (Legg ved eget ark med tilleggsopplysninger hvis nødvendig) WHICH SUBJECTS DO YOU PLAN ON TAKING? (Attach a separate piece of paper with additional information if necessary)

Land / Country **Sør Korea**	Lærested / Institution **KAIST**	By / Town **Daejeon**	Antall semester / Number of semesters **2**
Emnekode / Subject code	Emnenavn / Subject name		Vekting / Weighting
10.586 3.K/ Kemne	**Introductory Korean for Foreigners I**		3
31.572 /A S	**Analysis of Weapon Systems**		3
35.532 E i T	**Introduction to brain IT**		3
35.735 4265	**Computer Vision**		3
36.570 4173	**Artificial Intelligence and Machine**		3

	Learning	
36.632	Embedded Operating Systems	3
43.544 4290	Game Studies (Ludology)	3
88.622 4280	Game Theory and Applications	3
Type studiepoeng (f.eks. ECTS, units, credits, osv.) / Type of study credits (e.g. ECTS, units, credits, etc.)		**Credits**

HVILKE EMNER VED NTNU SKAL DETTE ERSTATTE? (F.eks. del av fordypning/obligatoriske emner eller valgfri del av studieprogram) / **WHICH SUBJECTS AT NTNU ARE TO BE REPLACED BY THESE?** (E.g. part of specialization/mandatory subjects, or elective part of study programme)

Studiepoeng / Study credits

Emnekode / Subject code	Emnetittel / Subject title	
	Eksperter i team	**7,5**
	Ingeniøremne annet studieprogram	**7,5**
	Komplementæremne	**7,5**
	Kundestyrt prosjekt	**15**
TDT4173	**Maskinlæring og case-basert resonnering**	**7,5**
TDT4265	**Datasyn**	**7,5**
TDT4280	**Multiagent-systemer og spillteori**	**7,5**

6. DOKUMENTASJON / DOCUMENTATION

Kryss av /
Check as
applies

**Emnebeskrivelse /
Subject description**   ☒

**Pensumlister /
Syllabuses**   ☐

**Portfolio, skisser,
tegninger / Portfolio,
sketches, drawings**   ☐

Emnebeskrivelser og pensumlister må legges ved søknaden dersom det søkes om godkjenning av emner som skal inngå som del av fordypning i bachelorgrad, eller emner i mastergraden. / If applying for subjects that are to be part of speialization in bachelor's degee, or subjects for master's degree: You need to attach subject descriptions and syllabus.

Sted/dato / Place/date   Studentens signatur / Student signature

KAIST, Daejeon - Pensum og emnebeskrivelser

Introductory Korean for Foreigners I

This course aims to enable students to have simple conversation, by learning basic sentence patterns and vocabulary in Korean. Students learn how to understand and use Hangul(Korean letter), furthermore they will be able to know specific language functions through meaningful practice dialogue. This class is also made in pursuit of the integrated text which is effective for students to practice four areas. which are reading, writing, speaking and listening.

Sogang Korean 1

Analysis of Weapon Systems

Provide for such basic principles and take advantage of a variety of weapons, including weapons systems analysis is not a weapon of war and considers the development process as a whole, to balls and guided weapons, electronic warfare, and general overall understanding of science and related weapons systems and the study about the technique. Also, learn the weapons systems that change the battlefield in the past, the research for future weapons systems of the future battlefield environment and consequent change in the future.
The acquisition of knowledge is a great interest for the entire weapon system through individual presentations and 1st Division announced.

50 Weapons that changed warfare, William Weir, the career press, 2005
How to make war, 제임스 더니건, 김병관 역, 프래닛 미디어, 2008
Made in war, 맥스부트, 송대범.한태영 역, 플래닛 미디어, 2007

Introduction to brain IT

This course will discuss the key differences in architecture and algorithms between conventional information processing systems (e. g. von Neumann machines) and biological brains. Subsequently, we will try to come up with the scaffold of a basic design for a non von Neumann type of brain-like information processing system.

Primary: von Neumann, John, The Computer and the Brain, Yale University Press
Secondary: Hawkins, Jeff, On Intelligence, An Owl Book
Tertiary: Trappenberg, Thomas, Fundementals of Computational Neuroscience, Oxford University Press

Computer Vision

This course will explore the principles, models and applications of computer vision. The course consists of five parts: image formation and image models; generic features, such as egdes and corners, from images; the multiple view analysis to recover three dimensional structure from images; segmentation of images and tracking; the object recognition methodologies.

Pensumliste ikke spesifisert.

Game Theory and Applications

Game theory provides a useful way of thinking in situations of interactive decision making. This course introduces students in management engineering to game theory. This course provides students with the basic solution concepts for different kinds of non-cooperative games, i.e. static and dynamic games under complete and incomplete information. The basic solution concepts that this course covers are Nash equilibrium, subgame-perfect equilibrium, Bayesian equilibrium, and perfect Bayesian equilibrian. This course emphasizes the application of game theory to economics and management, including duopolies, auctions and bargaining.

Gibbons, R. (1992): A Primer in Game Theory. Harlow: FT Prentice Hall
or
Gibbons, R. (1992): Game Theory for Applied Economists. Princeton: Princeton University Press.

Artificial Intelligence and Machine Learning

This course is an introductory graduate-level course on artificial intelligence and machine learning. The goal is to provide a general introduction to machine learning, and to understand the important modeling techniques and the associated algorithms used in the core machine learning research areas. Taking CS470 prior to this course is encouraged but not required. There will be problem sets, small programming projects, a mid-term exam, and a final project presentation.

Pensumliste ikke spesifisert.

Embedded Operating Systems

This course is concerned with the principles and practice of modern mobile operating systems. The new computing ecosystems and technologies revved up by mobile operating systems will be covered also. You will learn fundemental theories to design modern mobile operating systems and internal designs of practical operating systems such as Google Android. To understand new ecosystems, we will discuss cloud computing, virtualization, social network, and internet of things, wtc. The course goal is to give you a strong insights and practical experiences in the area of mobile operating systems.

Pensumliste ikke spesifisert.
50% prosjektarbeid.

Game Studies (Ludology)

Game studies (Ludology) are the discipline of studying games, players, their design and their roles in society and culture. These fields consist of multi- and inter-disciplinary research areas including computer science, psychology, sociology, anthropology, arts & literature, media studies, communication, theology and more. Introductory phase will be focused on basic overview of game studies such as history of games, changes of industry, basic concepts and theories that can form the basis for game field. In the deep understanding phase, based on diverse theoretical & case analysis approaches to the game areas, current trends and future directions of games can be considered.

Computer Games and New Media Cultures, A Handbook of Digital Games Studies, Fromme, Johannes & Unger, Alexander, 2012
Handbook of Digital Games, Angelides, Marios C., Aigus, Harry, 2014

80% prosjekt.