

University of Agder

University of Nebraska at Omaha

IT Administration Project

<http://bit.ly/hJwDfj>

Program description

The University of Nebraska at Omaha (UNO) and the University of Agder (UiA), Norway, are collaborating on the creation of a new undergraduate certificate in Information Technology Administration. The certificate is designed for students who are interested in managing the complex technical infrastructure of today's organizations. The certificate will consist of approximately 15 credit hours of hands-on courses, covering such areas as systems administration, network administration, database administration, security administration, and distributed systems. All courses will be offered on-line, using a variety of collaboration tools and teaching techniques that reflect the best of current practice. Students will take courses taught by both UNO and UiA instructors and will have the opportunity to work with students residing in a country other than their own.

We anticipate that the on-line international collaboration behind this certificate will offer many opportunities for pedagogical research, blending teaching and research to create a learning environment in which students both learn from and participate in teaching and research processes.

- the organization and effectiveness of virtual teams
- pedagogical strategies integrated with technology in a distributed, hybrid, cross-cultural setting
- tool and technology effectiveness
- processes for coping with constantly evolving technologies, including their evaluation, testing for appropriateness, and successful adoption and use
- education in the cloud and the role of virtual labs

Program Structure

The certificate will consist of a combination of courses offered by the University of Agder and by the University of Nebraska at Omaha. Moreover, some courses will be team taught by faculty from both universities. In cases where similar courses are currently offered by both institutions, students may take either course.

The workload of courses offered by the University of Adger is measured in European Credit Transfer System (ECTS) units, while the workload of courses offered by the University of Nebraska is measured in student credit hours (SCH). For this certificate, we assume an equivalence at the undergraduate level of 30 ECTS = 15 SCH for a single semester of study. The courses that will be included in the IT Administration certificate are listed in the table below. The notation indicates courses that have similar content.

Course	Course Title	Institution	ECTS	SCH
IS-204	IT Resource Operations (Network Administration)	UiA	10	5
IS-203	Advanced Database Systems(*)	UiA	10	5
ISQA 4300	Database Administration(*)	UNO	6	3
IS-209	Systems Administration with Free Software(#)	UiA	5	2
CIST 4350	Technical Systems Administration (#)	UNO	6	3
IS-303	Distributed Systems (~)	UiA	10	5
ISQA 4380	Distributed Technologies and Systems(~)	UNO	6	3
CIST 4370	Security Administration	UNO	6	3

Students may take these courses in a variety of combinations. Not all combinations will add up to exactly 15 SCH or 30 ECTS. Three examples of possible combinations are listed below, measured in SCH. Other combinations are possible.

Course	Course Title	SCH	ALT1	ALT2	ALT3
IS-204	IT Resource Operations (Network Administration)	5	5	5	5
IS-203	Advanced Database Systems(*)	5	5		5
ISQA 4300	Database Administration(*)	3		3	
IS-209	Systems Administration with Free Software(#)	2	2		
CIST 4350	Technical Systems Administration (#)	3		3	3

IS-303	Distributed Systems(~)	5			
ISQA 4380	Distributed Technologies and Systems(~)	3			3
CIST 4370	Security Administration	3	3	3	
	TOTAL		15	14	16

Program Scheduling

With respect to the schedule of course offerings, the on-line courses will be fully integrated into the regular schedule of course offerings at both institutions. As a starting point, each course in the certificate program will be offered once a year in the on-line format. We will monitor demand for the certificate and increase the frequency of offering should it be warranted.

With respect to the timeline for initial course offerings, we plan to offer each course as soon as development is complete. The following table shows the proposed timeline.

Course	Course Title	Institution	Start Date for Development	Completion and Initial Offering
IS-204	IT Resource Operations (Network Administration)	UiA	Spring 2011	Fall 2011
IS-203	Advanced Database Systems(*)	UiA	Spring 2011	Spring 2012
ISQA 4300	Database Administration(*)	UNO	Spring 2011	Fall 2011
IS-209	Systems Administration with Free Software(#)	UiA	Spring 2011	Fall 2011
CIST 4350	Technical Systems Administration (#)	UNO	Spring 2012	Fall 2012
IS-303	Distributed Systems(~)	UiA	Fall 2012	Spring 2013
ISQA 4380	Distributed Technologies and Systems(~)	UNO	Fall 2011	Spring 2012
CIST 4370	Security Administration	UNO	Fall 2012	Spring 2013

Program Development Resources

Peter Wolcott & Ilze Zigurs have been awarded funds from the University of Nebraska's On-line World Wide to support the following efforts at UNO:

Development or enhancement of on-line versions of four courses from the College of IS&T (ISQA 4300, ISQA 4380, CIST 4350, CIST 4370) @ \$4000/course	\$16,000.
Support for software licenses	\$1,500.
Support for a Teaching Assistant to assist with lab set-up and management for on-line course delivery.	\$2,500.

Carl Erik Moe and Hallgeir Nilsen have been awarded funds from the LA2010 program to support efforts at UiA, with a total of \$12.500, based on the expectation that the department also sponsors the project

UiA Budget

Development of on-line versions of three courses from Dept. of IS, IS-209/210, IS-204 and IS-203	NOK 75.000 / \$12.500
Support for a Teaching Assistant to assist with lab set-up and management for on-line course delivery.	Funding from the department, amount has to be set

Program Personnel

The following individuals are involved in some aspect of the proposed certificate.

Name	E-mail	Institution	Role
Peter Wolcott	pwolcott@unomaha.edu wolcott.peter@gmail.com wolcott.peter (Skype)	UNO	OWW grant investigator Instructor, ISQA 4300 & IS-203
Ilze Zigurs	izigurs@unomaha.edu	UNO	OWW grant investigator

	zigurs@gmail.com ilze.zigurs (Skype)		Chair, ISQA Department
Carl Erik Moe	carl.e.moe@uia.no car.e.moe@gmail.com callemoe1 (Skype)	UiA	LA2010 grant investigator Chair, Department of Information Systems
Hallgeir Nilsen	hallgeir.nilsen@uia.no hallgeirnilsen (Skype)	UiA	LA2010 grant investigator
Arne B. Mikalsen	arne.b.mikalsen@akersolutions.com	UiA	Instructor, IS-204
George Royce	groyce@unomaha.edu gkroyce (Skype)	UNO	Instructor, ISQA 4380
Janis Gailis	Janis.Gailis@uia.no	UiA	Instructor, IS-209
Steve Nugen	smnugen@nugensoft.com	UNO	Instructor, CIST 4370, CIST 4350
Tero Paivarinta	tero.paivarinta@uia.no teropaivarinta (Skype)	UiA	Instructor, IS-203