UNIVERSITY OF BORÅS

Information Security in a global world
Informationssäkerhet ur ett globalt perspektiv
7.5 credits

Ladok Code: 21IG1A
Version: 2.0
Established by: Education Committee 2015-04-08
Valid from: Autumn 2015

Education Cycle: First cycle
Main Field of Study (Progressive Specialisation): Informatics (G1N)
Disciplinary Domain: Natural sciences
Prerequisites:
Subject Area: Informatics/Computer and Systems Sciences
Grading Scale: ECTS-credits

Content
The course includes the following main areas:

• technical information (such as network security, system security and Internet security)
• strategic information security (security policy work, security standards, and security management as well as classification of information assets)
• operational information security (security awareness, incident management, crisis and risk management, as well as audits)

Learning Outcomes
The overall objective is to give the student an introduction to the field of information security from a multidisciplinary perspective. After the course the student should have a basic understanding of how to secure organizations' information systems. Students will develop basic skills and ability to deal with security from both a technical and an administrative perspective, focusing on globally operating organizations.

After completing the course, students should be able to:

Knowledge and understanding

1. use established terminology and be able to explain technical and practical security issues in the field
2. know the most common types of attacks against IT systems and to take appropriate administrative action to protect such systems
3. be ready to participate in development and investigative work in a security context,
4. explain the basic methods and techniques to enable different service needs of IT while avoiding the security problems that can arise when these activities are part of larger global organizations,
5. describe the basic guidelines as established practices in the profession regarding the use of information technology for dealing with security issues
6. explain key concepts and relations in the field of information

Skills and abilities

7. analyze and reflect on available and relevant information assets,
8. analyze threats and possible internal as well as external attacks and threats to information assets;
9. analyze and evaluate IT systems for information security;
10. set up a general plan of action and follow-ups based on the analysis and document the rationale for the selected measures
11. With a hands-on approach apply the basic methods and techniques to meet various needs of IT operations while achieving a satisfactory level of information security within the organization.

Ability to evaluate and approach

After completing the course, students have developed

12. a conscious and personal approach to different aspects of security issues in a global organization

Forms of Teaching
The course consists of a combination of lectures and exercises under supervision. Teaching is normally in English, but teaching in Swedish may occur if necessary. Literature is in English, but Swedish literature may occur if necessary.

Forms of Examination
The course is assessed through assignments with presentation and discussion to the group related to learning outcomes 7-11 of the course and an individual examination of all learning outcomes 1-6 and 12 of the course. To pass (E) for the entire course pass the assignments and examination. The overall grade of the course will be decided by the result of the written exam. Student rights and obligations at examination are according to guidelines and rules for the University of Borås.

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Literature and Other Teaching Materials
Breithaupt, Jim & Mark Merkow (2014), *Information Security - Principles and Practices, 2nd Edition*
Pearson IT Certification : Indianapolis, ISBN/ISSN: 978-0-7897-5325-0, 368 pages
Additional study material such as articles, labs, reading instructions, study questions and discussion questions are provided and distributed electronically throughout the course

Student Influence and Evaluation
The course is assessed through assignments with presentation and discussion to the group related to learning outcomes 7-11 of the course and an individual examination of all learning outcomes 1-6 and 12 of the course. To pass (E) for the entire course pass the assignments and examination. The overall grade of the course will be decided by the result of the written exam. Student rights and obligations at examination are according to guidelines and rules for the University of Borås.

Miscellaneous
The course is part of the Business Informatics program