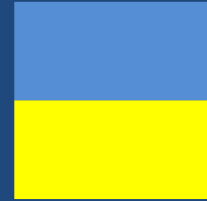


# Hands-On Analytics on Accounting Information Systems



(ABL-C1102), March- April 2022



Aalto University  
School of Business

[Course Info](#)

**It is a private presentation for the course at Aalto University, and we request you not to share the presentation publicly.**

# Instructor

**Vikash Sinha,**  
**Assistant Professor**  
**vikash.sinha@aalto.fi**

**Aalto University, Department of  
Accounting**

**Have 8+ years of experience in risk  
management and automation in  
Financial services**



# Learning Objectives

After the course students are able to:

(1) understand the essentials of sourcing, implementing and using AIS (The core ERP systems module)

(2) apply transaction processes (hands-on) by using a modern, Finnish AIS solution (Procounter by Accountor) (and also get the opportunity to obtain the official Procounter professional certification)

(3) analyze key AIS risks (e.g., fraud) and apply risk management strategies/frameworks

(4) understand the principles of risk management and internal controls

(5) apply SQL hands-on (and be certified in this competency by Data Camp)

# Assessment and Grading

**Final Grade: 0 – 5** (You need to pass all parts of the grading with at least 50% of the maximum points available – a – 25, b – 10, c- 15)

- a) Hands-On Practice assignments - *Practice assignments + SQL Certification* (group and individual) (50%)
- b) Case assignments (group) (20%)
- c) Exam (individual) (30%)

# First Task

1. Contact other course participants and form a team of 3.
  - In MyCourses → 'General discussion', you may indicate that you are searching for a team.
2. In MyCourses → 'Choose your team' → Click the checkbox of the team number of your choice

**❖ The choice has to be made before 4<sup>th</sup> March, 11:00 PM**

# Individual Assignments: SQL Certification (25 points)

- Instructions and submissions in MyCourses → ‘Database Management Module’
  - Detailed instructions are in the Mycourses page
    - More general instructions are in the syllabus
    - Individual assignments
    - You will receive invite to complete the course “Introduction to SQL” on Data camp
    - Follow the activities/videos/presentations/documents in the “Database Management Module” on mycourses to understand SQL and complete your assignment on Datacamp.
    - By 8<sup>th</sup> April, 2022, 11:00 PM/2300 you should upload the certification from Datacamp to get your credits of 25 points registered
    - Remember that you cannot finish this assignment in a day or two. So, in parallel to the course continue finalizing the assignment!
    - Only assignment “Introduction to SQL” on Datacamp is mandatory for 25 points
    - **The other module “Database Design” on Datacamp is for your further learning**

# Group work (Accountor report and five assignments: 25 points)

- **Instructions and submissions in MyCourses → ‘Module: Accountor’**
  - Detailed instructions are in the Mycourses page
    - More general instructions are in the syllabus
    - Group assignment
    - You will receive Accountor login details soon
    - Follow the activities/videos/presentations/documents in the “Module: Accountor” to understand the Accountor system and complete your assignment.
    - The five group assignments from Accountor module (one in Accountor module, three in Module II and one in Module V) need to be reflected in the final group reflection where grades of 25 points are provided. It is groups responsibility to follow the instructions of the five assignments and complete them.
    - By 8<sup>th</sup> April, 2022, 11:00 PM/2300 you should upload your group reflection to get your credits of 25 points registered
    - Remember that you cannot finish this assignment in a day or two. So, in parallel to the course continue finalizing the assignment!



# Group work (four case assignments: 20 points)

---

## Case Assignments

Group Assignment: Case Module I (4 points)

Group Assignment: Case Module III (6 points)

Group Assignment: Case Module IV (4 points)

Group Assignment: Case Module V (6 points)

---

# Exam

Online exam- **Wed 13 April 9:00 – 12**

Online re-exam – **Mon 16 May 16.00–19.00**

# Schedule of Assignments

Assignment	Date and time of submission
Please choose your team	Fri 4 Mar 2022, 11:00 PM
Group Assignment: Case Module I	Thu 10 Mar 2022, 11:00 PM
Group Assignment: Case Module III	Thu 17 Mar 2022, 11:00 PM
Group Assignment: Case Module IV	Thu 24 Mar 2022, 11:00 PM
Group Assignment: Case Module V	Thu 31 Mar 2022, 11:00 PM
Group Assignment: Accountor five assignments* and report	Fri 8 Apr 2022, 11:00 PM
Individual Assignment: SQL certification	Fri 8 Apr 2022, 11:00 PM

***\*The five assignments from accountor module (one in Accountor module, three in Module II and one in Module V) need to be reflected in the final group reflection where grades of 25 points are provided. It is groups responsibility to follow the instructions of the five assignments and complete them.***

# Schedule of course

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Accountor	SQL
1			Module I and Introduction (2 <sup>nd</sup> March 10:00-12:00)				
2		Module III: Investments (8 <sup>th</sup> March 10:00-12:00)					
3			Module III: Transactions (16 <sup>th</sup> March 10:00-12:00)				
4			Module IV: Fraud (23 <sup>rd</sup> March 10:00-12:00)				
5			Module V: Risk Management (30 <sup>th</sup> March 10:00-12:00)				
6			Wrap-up (6 <sup>th</sup> April 10:00-12:00)				

# Schedule for bonus points (optional)

Optional Individual Assignments	Date and time of submission
Bonus quiz: Module I	Fri 11 Mar 2022, 11:00 PM
Bonus quiz: Module III	Tue 15 Mar 2022, 11:00 PM
Bonus quiz: Module II	Tue 22 Mar 2022, 11:00 PM
Bonus quiz: Module IV	Tue 29 Mar 2022, 11:00 PM
Bonus quiz: Module V	Tue 5 Apr 2022, 11:00 PM

**Accountor certification test (only 10% pass rate) can fetch you 10 bonus points. Further details on test will Be provided soon!**

# Thank You

## READINGS

- Are listed in Syllabus and in all modules
  - Please read the book chapters thoroughly
- 

## Questions about the course should be asked primarily

- During the lectures
- In the course website (in MyCourses) → General discussion

# More details on readings

**Prescribed Book: Romney, Marshall B., Paul John Steinbart. Accounting information systems. Vol. 14: Prentice Hall, 2018**

Additional material (teacher's slides, cases, instructions and material for Data camp and Accountor) will be provided through MyCourses and other suitable media.

**The course is divided into seven modules. All numbered modules (I – IV) contain bonus quizzes<sup>1</sup>.**

**Module I – Conceptual foundations of AIS:** value of data and information, business processes and information, AIS and its link with corporate strategy and its role in value chains, organizations use of ERP, data flow diagrams, flow charts, business process diagrams **(Chapter 1, 2, and 3 from the prescribed book, teacher's slides/material and case 1)**

**Module II – Transaction cycle:** AIS role in documenting transaction cycles (Revenue, expenditure, production, HR and payroll cycles), Identify threats to data integrity in each of the transaction cycles and understand their managerial implications **(Chapter 12, 13, 14, and 15 from the prescribed book, teacher's slides/material)**

**Module III – AIS development and investment process:** System development phases, AIS development strategies, System design implementation and operation, Change and employee behavior **(Chapter 20, 21, and 22 from the prescribed book, teacher's slides/material and case 2)**

**Module IV – AIS fraud:** Computer fraud and its detection **(Chapter 5 and 6 from the prescribed book, teacher's slides/material and case 3)**

**Module V – AIS risk management:** Internal controls and risk management processes, COBIT, COSO IC and ERM frameworks **(Chapter 7, 8, and 10 from the prescribed book, teacher's slides/material and case 4)**

**Hands on Module – Accountor:** six practical hands-on assignments

Assignment 1: Basic setting

Assignment 2: HRM and Payroll Cycle (Module II)

Assignment 3: Revenue Cycle (Module II)

Assignment 4: Expenditure Cycle (Module II)

Assignment 5: Management Accounting and Controls (Module V)

Assignment 6: Charts and Analysis (Module IV)

**Hands on Module – SQL:** relational databases and relational database management systems (RDBMS); XBRL potential and applications, SQL basics and its applications, Understand and run basic SQL in practice **(chapter 4 of the book, Data camp module, teacher's slides)**

Note: How to use Data camp and Accountor are explained during the course.