UAB
Universitat Autònoma de Barcelona

Strategy and Digital Leadership

Code: 107566
ECTS Credits: 6

2025/2026

Degree	Type	Year
Business and Information Technology	OP	4

Contact

Name: Xavier Verge Mestre

Email: xavier.verge@uab.cat

Teachers

Robert Josep Balleste Burguillos

Teaching groups languages

You can view this information at the end of this document.

Prerequisites

None

Objectives and Contextualisation

Work on the digital strategy and leadership that the role of the CIO or CDO should have in a current organization:

- Visualize organizations incorporating digital strategies.
- Undertake ideas and solutions that generate efficient proposals in the way services are provided.
- Facilitate the flow of information relevant to the organization, guaranteeing the good use and quality of data.
- Put the customer as a central element of the processes, taking into account human capital.
- Lead change processes in the management and provision of services to society.
- Know the strategies and reference frameworks in the management of ICT services, and have a sufficient basis to be able to support the implementation of a service strategy in companies and other organizations.

And, all this, balancing talent (people), data, and technology with ethics and efficiency.

Some Key Vectors that we should master:

- Foster entrepreneurial activity. Understand innovation as a philosophy of life
- Focus on service quality, customer service, and people.
- Promote talent and enhance teamwork among talented people

- Be able to lead digital technology implementations in business
- Modulate thinking structures that are flexible and fast to adapt to changes
- Find new ways to provide quick solutions to unexpected problems

Learning Outcomes

1. CM25 (Competence) Define the figure of the CIO and its functions in any type of organisation.
2. KM22 (Knowledge) Identify data management and communication systems based on the needs of an organisation, as well as their governance.
3. KM23 (Knowledge) Identify the contributions of innovations in the market of integrated management systems.

Content

1. The CIO in charge of ICT Management and Administration

- The CIO and the entrepreneurial mindset.
- Evolution of the role of the CIO
- Importance of female talent and their inclusion in managerial tasks

2. The CIO and the organization of the IT Department

- Traditional areas: Development and Operations
- DevOps as a philosophy
- Agile versus traditional methodologies
- Other common areas in an IT department

3. The CIO and the internal management of the IS service

- Reference frameworks in the quality of service management: ITIL, MOF, and CMMI-Svc
- Service processes and management

4. The CIO and Talent

- Need for talent. Scarce and essential resource. Talent, diversity, and Gender.
- High-performance equipment and work environment.
- Talent retention. involvement motivation
- Ability to work in processes and participate in projects
- New forms of digital work.

5. The CIO and data

- Data Governance, Data Management & Data Curation.
- Organizational needs. Distribution and access to information
- Privacy, confidentiality, and regulatory compliance
- Informational transparency

6. The CIO and business technology

- Technological surveillance.
- Emerging technologies and their impact on business
- 5G, quantum computing, Blockchain, GenAI,...

7. The CIO and change management

- Sensitivity to the environment. Fast detection of changes
- Reluctance to change. Young organizations versus traditional organizations
- Agility in the rapid deployment of changes

8. The CIO and Digital Transformation

- Legacy Systems. Corporate systems and new digital needs. Bimodal IT
- Digital disruption and changes in user behavior
- Business needs. Proactivity in changesand new business models.
- Risks and dependencies of digital transformation.

9. The CIO and digital ethics

- New technologies and ethical dilemmas
- Rapid detection systems for unethical behavior
- Anti-corruption tools. Anti-discrimination. Anti-violation of human rights
- Work with legislative and regulatory gaps
- Critical spirit and ethical behavior

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Seminars, Case studies, and exercices	20	0.8	CM25, KM22, KM23, CM25
Study	69	2.76	CM25, KM22, KM23, CM25
Theory	25	1	CM25, KM22, KM23, CM25
Type: Supervised			
Tutorship	2	0.08	CM25, KM22, KM23, CM25
Type: Autonomous			
Case study preparation, writings and problem solving	32	1.28	CM25, KM22, KM23, CM25

General aspects

This subject has as its methodological basis the learning based on the knowledge taught in the theory sessions and the application of the same in the cases, problems or exercises and seminars developed in the course.

Lectures

In the theory sessions, the concepts that the students will apply in the exercises, cases and problems are explained.

Seminars, cases, problems, and exercises

In these sessions, the students will have the opportunity to incorporate the theoretical concepts in situations similar to reality.

Use of Artificial Intelligence (AI):

In this subject, the use of Artificial Intelligence (AI) technologies is allowed and encouraged as an integral part of the development of the work, provided that the final result reflects a significant contribution by the student in the analysis and personal reflection. In assignments, unless explicitly stated otherwise, the student must identify which parts have been generated with this technology, specify the tools used and include a critical reflection on how these have influenced the process and the final result of the activity. The lack of transparency in the use of AI will be considered a lack of academic honesty and may lead to a penalty in the grade of the activity, or greater sanctions in serious cases. The use of AI is not allowed in exams.

Note: 15 minutes of a class will be reserved, within the calendar established by the center/degree, for the students to complete the surveys to evaluate the performance of the teaching staff and to evaluate the subject/module.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Assessment

Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Continuous Assessment	60%	0	0	CM25, KM22, KM23
Exams	40%	2	0.08	CM25, KM22, KM23

This subject does not have a single assessment system.

The assessment of the subject takes into account the following elements:

- Continuous assessment (AC) 60%. Participation, Exercises and assignments: Problem-based learning exercises, case discussion, individual or team work, presentation of results in class and other tests that are determined. Class participation will also be assessed.
- Exams (EX) 40%. Partial exams may be scheduled throughout the course. Final exam will be scheduled in the Faculty's exam calendar

Calculation of the final grade:

- If AC>=5 AND EX>=3.5 --> The final grade for the subject (N) will be: N=40%(EX)+60%(AC).
- If EX<3.5 OR AC<5 --> N= MIN(40%(EX)+60%(AC); 4).
- The student passes the subject if N>=5, and fails if N<3.5. In the intermediate case, they can use the recovery process detailed below.
- Anyone who has participated in less than 20% of AC activities and has not taken part in the exams will be considered non-assessable.

Calendar of assessment activities

The dates of the different assessment activities (exams not scheduled by the faculty, classroom exercises, submission of work, ...) will be announced sufficiently in advance during the semester.
The dates of the partial and final tests of the subject are scheduled in the Faculty's exam calendar.
According to the UAB Academic Regulations, the scheduling of assessment tests cannot be modified unless there is an exceptional and duly justified reason for which an assessment act cannot be carried out. In this case, the people responsible for the degrees, after consulting the teaching staff and the affected students, will propose a new schedule within the corresponding academic period.

Students of the Faculty of Economics and Business who, by the previous paragraph, need to change an assessment date must submit the request by filling out the document Request for rescheduling an exam: https://eformularis.uab.cat/group/deganat_feie/reprogramacio-proves

Grade review procedure

The day when the final grades will be published will be announced, coinciding with the final exam. Similarly, information will be provided on the procedure, place, date, and time of the exam, review by University regulations.

Recovery Process

According to the UAB Academic Regulations: To participate in the recovery process, students must have previously been evaluated in a set of activities that represent a minimum of two-thirds of the total grade for the subject or module. They must have obtained an average grade for the subject between 3.5 and 4.9.

The date of this test will be scheduled in the Faculty's exam calendar. The recoverable part is the exam part.

The resulting grade will follow the same previous calculation. Whoever passes the retake, the resulting grade will be the maximum between 5 and 0.6*AC+0.4*3.5

Irregularities in the assessment acts

According to UAB academic regulations: Without prejudice to other disciplinary measures that may be deemed appropriate, and by current academic regulations, "if the student carries out any irregularity that may lead to a significant variation in the grade of an assessment act, this assessment act will be graded 0, regardless of the disciplinary process that may be instructed. If several irregularities occur in the assessment acts of the same subject, the final grade for this subject will be 0".

Bibliography

Manage the role of the CIO and IT department:

- Turban, E., Pollard, C., & Wood, G. (2018). *Information Technology for Management: Driving Digital Transformation to Increase Local and Global Performance, Growth and Sustainability* (11th ed.). John Wiley & Sons.
- Pearlson, K. E., & Saunders, C. S. (2019). *Managing and Using Information Systems: A Strategic Approach* (7th ed.). John Wiley & Sons.

IT service management and agile methodologies:

- ITIL Foundation. (2019). *ITIL 4 Foundation: ITIL 4 Edition*. AXELOS.
- Schwaber, K., & Sutherland, J. (2020). *The Scrum Guide*. Scrum.org & ScrumInc.
- Kim, G., Humble, J., Debois, P., & Willis, J. (2016). *The DevOps Handbook: How to Create World-Class Agility, Reliability, & Security in Technology Organizations*. IT Revolution Press.

Talent management, data and digital transformation:

- Davenport, T. H. (2018). *The AI Advantage: How to Think Smart about the New Technology*. MIT Press.
- Westerman, G., Bonnet, D., & McAfee, A. (2014). *Leading Digital: Turning Technology into Business Transformation*. Harvard Business Review Press.

Digital ethics and the social impact of technology:

- Floridi, L. (2019). *The Ethics of Information*. Oxford University Press.

Change management and digital transformation:

- Rogers, D. L. (2023). The Digital Transformation Roadmap: Rebuild Your Organization for Continuous Change. Penguin Random House.
- Ramsøy, T. Z., Furr, N., & Nel, K. (2019). From Classical Management to Behavioral Transformation. *Stanford Social Innovation Review*. https://doi.org/10.48558/BWNJ-5P48
- Saldanha, T. (2019). Why Digital Transformations Fail: The Surprising Disciplines of How to Take Off and Stay Ahead. Berrett-Koehler Publishers

Software

None

Groups and Languages

Please note that this information is provisional until 30 November 2025. You can check it through this link. To consult the language you will need to enter the CODE of the subject.

Name	Group	Language	Semester	Turn
(PLAB) Practical laboratories	211	Catalan/Spanish	second semester	afternoon
(TE) Theory	21	Catalan/Spanish	second semester	afternoon