

Course guide

300523 - TC - Control Theory

Last modified: 21/06/2026

Unit in charge: Castelldefels School of Telecommunications and Aerospace Engineering
Teaching unit: **Degree:** BACHELOR'S DEGREE IN SATELLITE ENGINEERING (Syllabus 2024).
(Compulsory subject).
Academic year: 2026 **ECTS Credits:** 5.0 **Languages:** Catalan

LECTURER

Coordinating lecturer: Definit a la infoweb de l'assignatura.

Others: Definit a la infoweb de l'assignatura.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

anglès

STUDY LOAD

Type	Hours	Percentage
Hours small group	13,8	11.03
Self study	70,0	55.96
Hours large group	41,3	33.01

Total learning time: 125.1 h

CONTENTS

title english

Description:

content english

Full-or-part-time: 11h

Theory classes: 5h

Self study : 6h

title english

Description:

content english

Full-or-part-time: 25h 30m

Theory classes: 9h 30m

Laboratory classes: 1h

Self study : 15h



title english

Description:

content english

Full-or-part-time: 27h

Theory classes: 10h

Laboratory classes: 1h

Self study : 16h

title english

Description:

content english

Full-or-part-time: 32h

Theory classes: 10h 30m

Laboratory classes: 4h 30m

Self study : 17h

title english

Description:

content english

Full-or-part-time: 29h 30m

Theory classes: 9h

Laboratory classes: 4h 30m

Self study : 16h

GRADING SYSTEM

BIBLIOGRAPHY

Basic:

- Palani, S. Automatic control systems : with MATLAB [on line]. Second edition. Cham, Switzerland: Springer, 2022 [Consultation: 16/06/2026]. Available on: <https://link-springer-com.recursos.biblioteca.upc.edu/book/10.1007/978-3-030-93445-3>. ISBN 9783030934446.

- Franklin, Gene F.; Powell, J. David; Emami-Naeini, Abbas. Feedback control of dynamic systems [on line]. Eighth edition. Harlow, England: Pearson Education Limited, 2020 [Consultation: 16/06/2026]. Available on: <https://ebookcentral-proquest-com.recursos.biblioteca.upc.edu/lib/upcatalunya-ebooks/detail.action?pq-origsite=primo&docID=5770170>. ISBN 9781292274546.

Complementary:

- DiStefano, Joseph J.; Stubbleud, Allen R.; Williams, Ivan J. Schaum's outline of feedback and control systems [on line]. 2nd ed. New York: McGraw-Hill, 2014 [Consultation: 16/06/2026]. Available on: <https://www-accessengineeringlibrary-com.recursos.biblioteca.upc.edu/content/book/9780071829489?implicit-login=true>. ISBN 0-07-183077-4.

- Golnaraghi, M. F.; Kuo, Benjamin C. Automatic Control Systems [on line]. Tenth Edition. New York, N.Y: McGraw-Hill Education, 2017 [Consultation: 26/06/2026]. Available on: <https://www-accessengineeringlibrary-com.recursos.biblioteca.upc.edu/content/book/9781259643835>. ISBN 9781259643835.

- Dorf, Richard C., author; Bishop, Robert H., 1957- author. Modern control systems [on line]. Fourteenth edition. Harlow, United

Kingdom: Pearson Education Limited, 2022 [Consultation: 26/06/2026]. Available on: <https://ebookcentral-proquest-com.recursos.biblioteca.upc.edu/lib/upcatalunya-ebooks/detail.action?pq-origsite=primo&docID=6768799>. ISBN 9781292422350.

- Sundararajan, D. Control systems : an introduction [on line]. Cham, Switzerland: Springer, 2022 [Consultation: 26/06/2026]. Available on: <https://link-springer-com.recursos.biblioteca.upc.edu/book/10.1007/978-3-030-98445-8>. ISBN 9783030984441.