

Program	09TT- Engineering in Telecommunication Technologies and Services
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Course number and name	
Number	95000006
Name	Physics 2 Física General 2
Semester	Y1-S2

Credits and contact hours	
ECTS Credits	4.5
Contact hours	59.5

Coordinator's name	Maicas Ramos, Marco César
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Specific course information		
Description of course content		
It is a general physics course covering first and second principles of thermodynamics, simple harmonic motion including damped and forced oscillations, mechanical waves including acoustics and geometrical optics.		
List of topics to be covered		
1. Thermodynamics, 2. Oscillators, 3. Waves, 4. Optics		
Prerequisites or co-requisites		
Physics 1		
Course category in the program		
<input checked="" type="checkbox"/> R (required)	<input type="checkbox"/> E (elective)	<input type="checkbox"/> SE (selective elective)

Specific goals for the course
Specific outcomes of instruction
RA94 - Learn and understand the theories and laws that explain the way the Universe works.
RA95 - Learn how to analyze scientifically and how to solve problems applying the basic laws of physics.
RA96 - Learn to appreciate the importance of experimentation as the only way to validate a theory however beautiful it may seem.
RA97 - Acquire qualitative and quantitative knowledge about physical phenomena essential to start learning others with a higher level of complexity.

Student outcomes addressed by the course

CECT8, CG9

Bibliography and supplemental materials

- Tipler, P.A., Mosca, G. "Física", vol. 1 y 2, 6ª edición, Ed. Reverté, 2010
- Alonso, M y Finn, E.J. "Física I y II". Ed. Addison-Wesley, 1987
- De Juana, J.M. "Física general 1 y 2". Ed. Alhambra Universidad, 1988
- Sánchez, P., Alcober, V., Duro, C., Sanz, A. y Mareca, P , "Manual del Laboratorio de Física". P. Ed. Dpto. de Publicaciones de la E.T.S.I.Telecomunicación
- Alcober, V. y Mareca, P. Problemas de Oscilaciones resueltos. Fundetel, 2009
- Alcober, V. y Mareca, P. Problemas de Ondas resueltos. Fundetel, 2009
- Alcober, V. y Mareca, P. Problemas de Óptica Geométrica resueltos. Fundetel, 2009
- Sánchez del Rio, C. "Análisis de errores". Ed. Eudema, Madrid 1989
- Alcober, V. y Mareca, P. Problemas de Termodinámica Resueltos. Fundetel, 2009
- WEB: <http://moodle.upm.es>

Teaching methodology

<input checked="" type="checkbox"/> lectures	<input checked="" type="checkbox"/> problem solving sessions	<input type="checkbox"/> collaborative actions	<input checked="" type="checkbox"/> laboratory sessions
Other:			