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| Program | 59EC – Communications Electronic Engineering B. Eng. 59SC – Telecommunications Systems Engineering B. Eng. 59SO – Sound and Image Engineering B.Eng. 59TL – Telematics Engineering B. Eng. |
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| Course code and name | |
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| Code | 595040065 |
| Name | Women in Science and Technology |
| Semester | S6 [(February-June)] |

| Credits and contact hours | |
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| ECTS Credits | 3 |
| Contact hours | 30 |

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| Coordinator's name | Sánchez Agudo, Marta [marta.sanchez@upm.es] |
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| Specific course information | |
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| Description of course content | |
| This course provides a basic overview of the history of women in science and technology. Students will learn about the specific contributions of women in a variety of disciplines. The class will also address how both historical and modern biases within science and technology, as well as in the portrayals of women and girls in the media and popular culture, can affect outcomes in these areas. Students from all fields and levels of preparation are encouraged to join the course. | |
| List of topics to be covered | |
| 1. Introduction. <ul style="list-style-type: none"> 1.1. What do we understand by science and gender? 1.2. Motivation of this subject in the current sociocultural context. 2. History of women in science and technology <ul style="list-style-type: none"> 2.1. Women scientists in the ancient world and Middle Ages 2.2. From the Enlightenment to the 19th century 2.3. The 19th and early 20th centuries 2.4. World War II and social changes 3. Revolutionary scientists, but not recognized. <ul style="list-style-type: none"> 3.1. The Matilda effect and its consequences. 3.2. The rarity of female Nobel laureates. 4. Current role of women in science. 5. How sexism and stereotyping in vocational education promote and reinforce gendered occupations 6. Neurosexism: the myth that men and women have different brains | |
| Prerequisites or co-requisites | |
| None | |

| Course category in the program | |
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| <input type="checkbox"/> R (required) | <input checked="" type="checkbox"/> E (elective) (elective courses may not be offered every year) |

| Specific goals for the course |
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| Specific outcomes of instruction CG 02 - Ability to search and select information, critical reasoning and elaboration and defense of arguments within the area. CG 03 - Ability to express oneself correctly orally and in writing and to transmit information through documents and public presentations. CG 05 - Ability to work in a team and in multidisciplinary environments. CG 11 - Skills for the use of the Information and Communication Technologies. CG 12 - Ability for interpersonal relations and work in a national and international context, with the capacity to express oneself orally and in writing in the English language. |

| Further reading and supplementary materials |
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| <ul style="list-style-type: none"> – Londa Schiebinger. Has feminism changed science? Harvard University Press, 1999. – Ruth Watts. Women in Science: a Social and Cultural History, Routledge, 2007. – Barbara Smith Shearer and Benjamin F. Shearer Notable Women in the Physical Sciences. A Biographical Dictionary, ABC-CLIO, 1997. – European Commision. Women in science, Publications Office of the European Union, 2010 – Eve Curie. Madame Curie: A Biography, Da Capo Press, 2001. – Marilyn Ogilvie and Joy Harvey. The biographical dictionary of women in science: pioneering lives from ancient times to the mid-20th century, Routledge, 2000. – Saini, A. Inferior: How science got women wrong -and the new research that's rewriting the story. Beacon Press. – Cordelia Fine, Delusions of Gende. London icon books, 2011. |

| Teaching methodology | | | |
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| <u> X </u> lectures | <u> </u> <u> </u> problem solving sessions | <u> X </u> collaborative actions | <u> </u> <u> </u> laboratory sessions |
| Other: | In-class presentations, talks, videos, cooperative learning | | |