ETSI TELECOMUNICACIÓN. List of courses for the 2024-2025 Academic Year

# 1. Main knowledge areas and notices

Our ISCED codes for our studies are:

* 06.5 Electronic Eng. and Telecommunications/523 Electronics and automation/0714 Electronics and automation
* 0211 Audio-visual Techniques and Media Production

Some other areas, such as Physics related to Acoustics, Photonics, and related matters can be considered.

We offer courses in 7 degrees:

1. Code 190. [GITST] Grado en Ingeniería de Tecnologías y Servicios de Telecomunicación(Bachelor's Degree in Telecommunications Technology Engineering). It is a 4-year Bachelor's degree.
2. Code 194. [GTDM] Grado en Tecnología Digital y Multimedia(Bachelor's Degree in Digital and Multimedia Technology). It is a 4-year Bachelor's degree.
3. Code 205. [GIF] Grado en Ingebiería Física(Bachelor's Degree Physical Engineering). It is a 4-year Bachelor's degree.
4. Code 200. [GMAT] Grado en Matemáticas(Bachelor's Degree in Mathematics). It is a 4-year Bachelor's degree.
5. Code 2214. [MUIT] Máster Universitario en Ingeniería de Telecomunicación (Master’s Degree in Telecommunication Engineering). Professionally and firm-oriented. It is a 2-year Master's degree.
6. Code 2179. [MUTSRC] *Máster Universitario en Tecnologías, Sistemas y Redes de Comunicaciones*, (Master's Degree in Communication Technologies, Systems and Networks). Scientific Master that leads to a PhD. It is a 1- year Master's degree. You MUST upload your CV and have a strong background in Telecommunications*.* Please note that English courses are no longer offered in this degree except 30738 and several seminars (check below).
7. Code 2319. [MUISE] *Máster Universitario en Ingeniería de Sistemas Electrónicos* (Master's Degree in Electronic Systems Engineering). Scientific Master that leads to a PhD or professional market. Corresponds to a 1-year Master's degree. You MUST upload your CV and have a strong background in Electronics. There are few places available, and deadlines are very strict; please

You can choose freely among all the courses we enlist below, although you should be aware that to take courses on masters, you have to be previously accepted by their directors. Please be well aware that you can only get a Master’s degree if your home institution has a double degree agreement with our School and you accomplish the specific academic plan for double degree students.

PLEASE NOTICE THAT WE HAVE NO COURSES ON FINE ARTS, AUTOMATICS, POWER ELECTRONICS, OR BIOMEDICAL ENG.

TThose courses are taught in other schools, and their availability is limited to two courses per school. You would only be able to pick them up, provided there were free places when you arrive in Valencia.

Please consider that examinations in the same semester for courses in a different course year could overlap (i.e., the 3rd-year course Fundamentos de transmisión and the 4th-year course Microondas could have the same examination day or even hour).

Bachelor's and Master’s degree Thesis can be written in English, and you can also write your dissertation in English. Remember that if you take this thesis, your dissertation MUST BE done in Valencia during your stay. There are different calls to do your dissertation. If you are interested, please visit our office.

All courses are read in Spanish unless explicitly stated or written in English in the following tables.

You can check the contents and full details of every course at the link: https://aplicat.upv.es/buscasiupv-app/ You only need to feed the search box with a course code.

# Courses available for exchange students at the Degree 190 “Grado en Ingeniería de Tecnologías y Servicios de Telecomunicación” (GITST)

## 3rd year

| CODE | COURSE | SEMESTER | LANGUAGE | BRANCH | ECTS Cred |
| --- | --- | --- | --- | --- | --- |
| 12448 | Sensores | B | ESP | ELECTRÓNICA | 4,5 |
| 12452 | Fundamentos de VLSI | B | ESP | ELECTRÓNICA | 4,5 |
| 12453 | Aplicaciones de los Microcontroladores | B | ESP | ELECTRÓNICA | 4,5 |
| 12456 | Electrónica Analógica Integrada | B | ESP | ELECTRÓNICA | 4,5 |
| 12465 | Acústica Arquitectónica | B | ESP | IMAGEN Y SONIDO | 6 |
| 12471 | Equipos y Sistemas de Audio | B | ESP | IMAGEN Y SONIDO | 6 |
| 12473 | Sistemas de Video | B | ESP | IMAGEN Y SONIDO | 6 |
| 12429 | Comunicaciones Digitales | B | ESP | SISTEMAS | 4,5 |
| 14125 | Tratamiento Digital de Señales en Comunicaciones | B | ESP | SISTEMAS | 4,5 |
| 12433 | Radiocomunicaciones | B | ESP | SISTEMAS | 4,5 |
| 12434 | Líneas de Transmisión | B | ESP | SISTEMAS | 4,5 |
| 12441 | Redes Públicas de Acceso | B | ESP | TELEMÁTICA | 6 |
| 12447 | Comunicación de Datos | B | ESP | TELEMÁTICA | 6 |
| 14124 | Comunicaciones Multimedia | B | ESP | COMÚN | 4.5 |

## 4th year

| CODE | COURSE | SEMESTER | LANGUAGE | BRANCH | ECTS CREDITS |
| --- | --- | --- | --- | --- | --- |
| 12451 | Procesadores Digitales de Señal (DSP) | A | ESP | ELECTRÓNICA | 4,5 |
| 12449 | Instrumentación y Calidad | A | ESP | ELECTRÓNICA | 6 |
| 12455 | Sistemas Electrónicos de Comunicaciones | A | ESP | ELECTRÓNICA | 6 |
| 12454 | Microelectrónica Analógica y Mixta | A | ESP | ELECTRÓNICA | 4,5 |
| 12461 | Instrumentación Biomédica | A | ESP | ELECTRÓNICA | 4,5 |
| 12462 | Desarrollo de Sistemas Electrónicos | A | ESP | ELECTRÓNICA | 4,5 |
| 12463 | Tratamiento de Imágenes | A | ESP | IMAGEN Y SONIDO | 4,5 |
| 12467 | Proyectos e Instalaciones Audiovisuales | A | ESP | IMAGEN Y SONIDO | 4,5 |
| 12468 | Distribución de Señales Audiovisuales | A | ESP | IMAGEN Y SONIDO | 4,5 |
| 12470 | Producción Audiovisual | A | ESP | IMAGEN Y SONIDO | 4,5 |
| 12472 | Tratamiento Digital de Audio | A | ESP | IMAGEN Y SONIDO | 6 |
| 12466 | Acústica Ambiental | A | ESP | IMAGEN Y SONIDO | 6 |
| 12425 | Radiodeterminación | A | ESP | SISTEMAS | 4,5 |
| 12432 | Tecnologías y Sistemas en Redes de Acceso | A | ESP | SISTEMAS | 4,5 |
| 14121 | Antenas | A | ESP | SISTEMAS | 6 |
| 13173 | Microondas | A | ESP | SISTEMAS | 4,5 |
| 14122 | Comunicaciones Móviles e Inalámbricas | A | ESP | SISTEMAS | 6 |
| 13175 | Comunicaciones Espaciales | A | ESP | SISTEMAS | 4,5 |
| 12437 | Redes Corporativas | A | ESP | TELEMÁTICA | 6 |
| 12440 | Redes Públicas de Transporte | A | ESP | TELEMÁTICA | 4,5 |
| 12445 | Ingeniería de Sistemas Telemáticos | A | ESP | TELEMÁTICA | 4,5 |
| 12438 | Conmutación | A | ESP | TELEMÁTICA | 4,5 |
| 14123 | Sistemas Telemáticos para la Gestión de la Información | A | ESP | TELEMÁTICA | 4,5 |
| 12446 | Seguridad | A | ESP | TELEMÁTICA | 6 |
| 12431 | Sistemas de Comunicaciones Ópticas | B | ESP | OPTATIVAS | 4,5 |
| 12457 | Sistemas complejos Bioinspirados | B | ESP | OPTATIVAS | 4,5 |
| 12421 | Política y Normativa de Telecomunicación | B | ESP | OPTATIVAS | 4,5 |
| 12424 | Inglés para fines Académicos y Profesionales (B2) | B | ESP | OPTATIVAS | 4,5 |
|  |  |  |  |  |  |
| 12483 | Trabajo Fin de Grado/Bachelor Degree Thesis | A-B | ESP/ENG | - | 12 |

# Courses available for exchange students at the Degree 194 “Bachelor's Degree in Digital and Multimedia Technology” (GTDM)

NOTICE: There are only 5 places available for each course. Assignments in order of arrival.

1st Year

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CODE | COURSE | SEMESTER | LANGUAGE | BRANCH | ECTS CREDITS |
| [14178](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14178&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Matemáticas](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14178&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | T | ESP | COMMON | 12 |
| [14179](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14179&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Sociedad Digital](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14179&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | A | ESP | COMMON | 3 |
| [14180](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14180&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Programación](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14180&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | T | ESP | COMMON | 12 |
| [14181](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14181&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Computadores y Sistemas Operativos](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14181&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | A | ESP | COMMON | 6 |
| [14182](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14182&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Arquitecturas de Redes](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14182&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | B | ESP | COMMON | 6 |
| [14183](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14183&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Física](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14183&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | B | ESP | COMMON | 6 |
| 14196 | Medios de Transmisión | B | ESP | COMMON | 6 |
| [14186](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14186&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Organización y Transformación Digital](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14186&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | B | ESP | COMMON | 6 |
| [14203](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14203&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Narrativa y Lenguaje Audiovisual](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14203&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | A | ESP | COMMON | 6 |

2nd Year

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CODE | COURSE | SEMESTER | LANGUAGE | BRANCH | ECTS CREDITS |
| [14184](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14184&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Sonido, Óptica y Movimiento](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14184&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | A | ESP | COMMON | 6 |
| [14185](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14185&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Electrónica](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14185&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | A | ESP | COMMON | 6 |
| [14193](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14193&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Talleres y Seminarios de Tecnologías Emergentes I](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14193&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | B | ESP | COMMON | 6 |
| [14198](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14198&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Señales y Sistemas Audiovisuales](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14198&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | A | ESP | COMMON | 6 |
| [14199](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14199&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Comunicación de Datos](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14199&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | B | ESP | COMMON | 6 |
| [14204](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14204&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Diseño Gráfico](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14204&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | B | ESP | COMMON | 6 |
| [14206](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14206&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Aplicaciones y Usabilidad](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14206&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | B | ESP | COMMON | 6 |
| [14208](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14208&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Sistemas embebidos](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14208&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | B | ESP | COMMON | 6 |
| [14210](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14210&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Redes de Distribución de Contenidos](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14210&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | A | ESP | COMMON | 6 |
| [14211](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14211&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Tecnologías Web](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14211&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | A | ESP | COMMON | 6 |

3rd Year

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CODE | COURSE | SEMESTER | LANGUAGE | BRANCH | ECTS CREDITS |
| [14187](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14187&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Dirección y Gestión de Proyectos](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14187&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | A | ESP | COMMON | 6 |
| [14194](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14194&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Talleres y Seminarios de Tecnologías Emergentes II](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14194&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | B | ESP | COMMON | 6 |
| [14195](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14195&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Equipos Multimedia](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14195&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | A | ESP | COMMON | 6 |
| [14196](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14196&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Medios de Transmisión](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14196&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | B | ESP | COMMON | 6 |
| [14200](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14200&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Codificación de la Información](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14200&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | A | ESP | COMMON | 6 |
| [14201](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14201&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Voz y Audio Digital](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14201&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | B | ESP | COMMON | 6 |
| [14202](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14202&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Imagen y Vídeo Digital](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14202&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | B | ESP | COMMON | 6 |
| [14209](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14209&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Interacción, sensores y transductores](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14209&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | A | ESP | COMMON | 6 |
| [14212](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14212&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Seguridad y Gestión de Derechos Digitales](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14212&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | A | ESP | COMMON | 6 |
| [14213](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14213&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Plataformas de Streaming](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14213&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | B | ESP | COMMON | 6 |

4th Year

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CODE | COURSE | SEMESTER | LANGUAGE | BRANCH | ECTS CREDITS |
| [14188](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14188&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Modelos de Negocio](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14188&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | A | ESP | COMMON | 6 |
| [14197](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14197&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Sistemas y Estándares de Distribución](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14197&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | A | ESP | COMMON | 6 |
| [14205](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14205&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Edición y Postproducción Audiovisual](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14205&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | A | ESP | COMMON | 6 |
| [14207](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14207&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Desarrollo de Videojuegos](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14207&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | A | ESP | COMMON | 6 |
| [14214](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14214&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | [Plataformas IoT](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14214&p_caca=act&P_IDIOMA=c&p_vista=MSE&p_tit=194) | A | ESP | COMMON | 6 |
| [14189](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14189&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=194) | [Frameworks para el desarrollo completo de aplicaciones web](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14189&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=194) | B | ESP | OPTATIVA | 4.5 |
| [14190](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14190&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=194) | [Ideación, diseño y programación de proyectos interactivos](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14190&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=194) | B | ESP | OPTATIVA | 4.5 |
| [14705](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14705&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=194) | [Introducción al aprendizaje automático en aplicaciones de telecomunicaciones](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14705&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=194) | B | ESP | OPTATIVA | 4.5 |
| [14192](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14192&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=194) | [Inglés científico-técnico (Nivel B1)](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14192&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=194) | A | ENG | OPTATIVA | 4.5 |
| [14191](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14191&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=194) | [Inglés para Fines Académicos y Profesionales (Nivel B2)](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14191&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=194) | B | ENG | OPTATIVA | 4.5 |
| [12424](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=12424&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=194) | [Professional English (nivel B2)](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=12424&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=194) | B | ENG | OPTATIVA | 4.5 |

# Courses available for exchange students at the Degree 200 “Bachelor's Degree in Mathematics” (GMAT)

1st Year

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CODE | COURSE | SEMESTER | LANGUAGE | BRANCH | ECTS CREDITS |
| [14313](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14313&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Álgebra Lineal y Geometría I](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14313&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |
| [14316](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14316&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Análisis numérico](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14316&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | B | ESP | COMMON | 6 |
| [14314](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14314&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Cálculo](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14314&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |
| [14317](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14317&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Ecuaciones Diferenciales I](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14317&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | B | ESP | COMMON | 6 |
| [14315](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14315&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Estadística](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14315&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |
| [14318](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14318&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Matemática Discreta](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14318&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | B | ESP | COMMON | 6 |

2nd Year

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CODE | COURSE | SEMESTER | LANGUAGE | BRANCH | ECTS CREDITS |
| [14328](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14328&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Álgebra Lineal y Geometría II](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14328&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |
| [14323](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14323&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Cálculo en varias variables](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14323&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |
| [14330](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14330&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Estructuras Algebraicas I](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14330&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |
| [14337](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14337&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Resolución numérica de sistemas lineales y no lineales](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14337&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |
| [14324](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14324&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Variable Compleja](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14324&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |

3rd Year

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CODE | COURSE | SEMESTER | LANGUAGE | BRANCH | ECTS CREDITS |
| [14335](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14335&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Ecuaciones diferenciales II](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14335&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |
| [14341](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14341&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Inferencia Estadística](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14341&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |
| [14326](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14326&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Integral múltiple](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14326&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |
| [14336](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14336&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Investigación Operativa](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14336&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |
| [14332](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14332&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Topología General](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14332&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |

4th Year

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CODE | COURSE | SEMESTER | LANGUAGE | BRANCH | ECTS CREDITS |
| [14329](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14329&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Álgebra Lineal y Geometría III](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14329&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |
| [14331](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14331&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Estructuras Algebraicas II](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14331&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |
| [14333](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14333&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Geometría Diferencial](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14333&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |
| [14327](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14327&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Integración curvilínea y de superficie](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14327&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |
| [14338](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14338&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Resolución numérica de ecuaciones en derivadas parciales](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14338&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |

5th Year

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CODE | COURSE | SEMESTER | LANGUAGE | BRANCH | ECTS CREDITS |
| [14325](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14325&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Análisis de Fourier](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14325&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |
| [14339](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14339&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Computación de altas prestaciones](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14339&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |
| [14340](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14340&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Modelización](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14340&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |
| [14342](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14342&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Modelos Predictivos y de Clasificación](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14342&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |
| [14334](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14334&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | [Topología Algebraica](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14334&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=200) | A | ESP | COMMON | 6 |

# Courses available for exchange students at the Degree 205 “Bachelor's Degree in Physical Engineering” (GFIS)

1st Year

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CODE | COURSE | SEMESTER | LANGUAGE | BRANCH | ECTS CREDITS |
| [14481](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14481&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Álgebra](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14481&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | A | ESP | COMMON | 6 |
| [14480](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14480&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Cálculo I](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14480&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | A | ESP | COMMON | 6 |
| [14483](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14483&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Cálculo II](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14483&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | COMMON | 6 |
| [14484](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14484&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Física I](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14484&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | A | ESP | COMMON | 6 |
| [14485](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14485&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Física II](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14485&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | COMMON | 6 |
| [14489](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14489&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Fundamentos de Organización y Gestión de Empresas](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14489&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | COMMON | 6 |
| [14486](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14486&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Fundamentos Químicos para Ingeniería I](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14486&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | A | ESP | COMMON | 6 |
| [14487](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14487&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Fundamentos Químicos para Ingeniería II](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14487&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | COMMON | 6 |
| [14488](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14488&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Informática y Programación](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14488&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | A | ESP | COMMON | 6 |
| [14482](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14482&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Métodos Matemáticos I](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14482&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | COMMON | 6 |

2nd Year

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CODE | COURSE | SEMESTER | LANGUAGE | BRANCH | ECTS CREDITS |
| [14510](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14510&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Campos y Ondas](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14510&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | COMMON | 6 |
| [14499](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14499&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Electrónica](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14499&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | COMMON | 6 |
| [14493](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14493&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Física de Fluidos](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14493&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | COMMON | 6 |
| [14492](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14492&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Física Estadística](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14492&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | COMMON | 6 |
| [14490](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14490&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Mecánica Analítica](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14490&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | A | ESP | COMMON | 6 |
| [14496](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14496&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Métodos Matemáticos II](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14496&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | A | ESP | COMMON | 6 |
| [14497](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14497&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Probabilidad y Señales Aleatorias](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14497&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | A | ESP | COMMON | 6 |
| [14498](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14498&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Programación para Ciencia y Tecnología](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14498&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | COMMON | 6 |
| [14511](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14511&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Señales, Sistemas y Circuitos](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14511&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | A | ESP | COMMON | 6 |
| [14491](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14491&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Termodinámica](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14491&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | COMMON | 6 |

3rd Year

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CODE | COURSE | SEMESTER | LANGUAGE | BRANCH | ECTS CREDITS |
| [14505](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14505&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Biofísica](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14505&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | COMMON | 6 |
| [14506](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14506&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Computación](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14506&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | COMMON | 6 |
| [14501](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14501&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Electrónica analógica](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14501&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | A | ESP | COMMON | 6 |
| [14500](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14500&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Electrónica digital](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14500&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | COMMON | 6 |
| [14494](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14494&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Física Cuántica](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14494&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | A | ESP | COMMON | 6 |
| [14504](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14504&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Fotónica](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14504&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | A | ESP | COMMON | 6 |
| [14502](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14502&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Instrumentación y experimentación](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14502&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | A | ESP | COMMON | 6 |
| [14495](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14495&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Mecánica cuántica](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14495&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | COMMON | 6 |
| [14503](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14503&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Proyectos de ingeniería física](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14503&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | COMMON | 6 |
| [14512](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14512&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Tratamiento Digital de la Señal](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14512&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | A | ESP | COMMON | 6 |

4th Year

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CODE | COURSE | SEMESTER | LANGUAGE | BRANCH | ECTS CREDITS |
| [14507](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14507&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Fotónica integrada](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14507&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | A | ESP | COMMON | 6 |
| [14509](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14509&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Gestión de la innovación y emprendimiento tecnológico](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14509&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | A | ESP | COMMON | 6 |
| [14508](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14508&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Nanotecnología](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14508&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | A | ESP | COMMON | 6 |
| [14514](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14514&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Ampliación de Mecánica Cuántica](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14514&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | A | ESP | OPTATIVA | 6 |
| [14513](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14513&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Biotecnología](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14513&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | A | ESP | OPTATIVA | 6 |
| [14521](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14521&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Computación Cuántica](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14521&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | OPTATIVA | 4.5 |
| [4520](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14520&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Ingeniería de Control](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14520&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | OPTATIVA | 4.5 |
| [15010](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=15010&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Ingeniería Física para sistemas espaciales](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=15010&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | OPTATIVA | 4.5 |
| [14519](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14519&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Inteligencia Artificial](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14519&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | OPTATIVA | 4.5 |
| [14705](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14705&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Introducción al aprendizaje automático en aplicaciones de telecomunicaciones](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14705&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | OPTATIVA | 4.5 |
| [15009](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=15009&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Nanomateriales](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=15009&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | OPTATIVA | 4.5 |
| [14515](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14515&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Sensores](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14515&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | A | ESP | OPTATIVA | 6 |
| [12431](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=12431&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Sistemas de Comunicaciones Ópticas](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=12431&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | OPTATIVA | 4.5 |
| [14518](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14518&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Sistemas Electrónicos Programables](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14518&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | OPTATIVA | 4.5 |
| [14517](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14517&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Tratamiento Digital de Imágenes](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14517&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ESP | OPTATIVA | 4.5 |
| [14516](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14516&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Tratamiento estadístico de Señales y Datos](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=14516&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | A | ESP | OPTATIVA | 6 |
| [12424](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=12424&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | [Professional English (nivel B2)](https://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=12424&p_caca=2023&P_IDIOMA=c&P_VISTA=MSE&p_tit=205) | B | ENG | OPTATIVA | 4.5 |

# Courses available for exchange students at the Degree 2214 “Master’s Degree in Telecommunication Engineering” (MUIT)

NOTICE ACCOMMODATION ISSUES: If you want to take courses only in semester A for the 1st year MUIT, MUTSRC or MUISE: Take into account that the examination period **takes place in February,** and probably you will have no accommodation for such a short period. We recommend you stay the whole academic year.

## 1st year

| CODE | COURSE | SEMESTER | LANGUAGE | BRANCH | ECTS Credits |
| --- | --- | --- | --- | --- | --- |
| 33459 | Procesamiento de Señal en Sistemas de Comunicaciones y Audiovisuales | A | ESP | SISTEMAS DE TELECOMUNICACIÓN Y AUDIOVISUALES | 6 |
| 33460 | Equipos y Subsistemas de Comunicaciones | A | ESP | SISTEMAS DE TELECOMUNICACIÓN Y AUDIOVISUALES | 6 |
| 33453 | Codiseño Hardware-Software | A | ESP | SISTEMAS ELECTRÓNICOS | 6 |
| 33454 | Transductores e Instrumentación Electrónica | A | ESP | SISTEMAS ELECTRÓNICOS | 6 |
| 33457 | Integración de Servicios Telemáticos | A | ESP | TELEMÁTICA | 6 |
| 33438 | Gestión Técnica y Económica de Proyectos de Telecomunicación | B | ESP | GESTIÓN TECNOLÓGICA DE PROYECTOS DE TELECOMUNICACIÓN | 4,5  |
| 33461 | Sistemas y Servicios de Transmisión por Radio | B | ESP | SISTEMAS DE TELECOMUNICACIÓN Y AUDIOVISUALES | 6 |
| 33462 | Redes de Transporte y Distribución por Cable | B | ESP | SISTEMAS DE TELECOMUNICACIÓN Y AUDIOVISUALES | 6 |
| 33455 | Circuitos Electrónicos de Alta Frecuencia | B | ESP | SISTEMAS ELECTRÓNICOS | 6 |
| 33456 | Interconexión de Redes de Telecomunicación | B | ESP | TELEMÁTICA | 7,5 |

## 2nd year THIS YEAR IS READ IN ENGLISH

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CODE | COURSE | SEMESTER | LANGUAGE | BRANCH | ECTS Credits |
| 33452 | ICT Applications in the Public Health | A | ENG | FORMACIÓN OPTATIVA | 4,5 |
| 33451 | Business Management Skills through Cinecoaching | A | ENG | FORMACIÓN OPTATIVA | 4,5 |
| 33449 | [Photonic Integrated Circuits: From Technology](http://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=33449&p_caca=2014&P_IDIOMA=c&p_vista=MSE&p_tit=2234) [to Business](http://www.upv.es/pls/oalu/sic_asi.Busca_Asi?p_codi=33449&p_caca=2014&P_IDIOMA=c&p_vista=MSE&p_tit=2234) | A | ENG | FORMACIÓN OPTATIVA | 4,5 |
| 33447 | Professional Seminaries I | A | ENG | FORMACIÓN OPTATIVA | 4,5 |
| 33448 | Professional Seminaries II | A | ENG | FORMACIÓN OPTATIVA | 4,5 |
| 33450 | Services Marketing | A | ENG | FORMACIÓN OPTATIVA | 4,5 |
| 33439 | Integración de tecnologías y sistemas en ingeniería de telecomunicación | A | ENG | GESTIÓN TECNOLÓGICADE PROYECTOS DE TELECOMUNICACIÓN | 7,5 |
| 33458 | Implantación de redes y servicios de telecomunicación | A | ENG | TELEMÁTICA | 4,5 |
|  |  |  |  |  |  |
| 33463 | Trabajo Fin de Máster – Master Degree Thesis | B | ESP/ENG | - | 30 |

# Courses available for exchange students at the Degree 2179 “Master's Degree in Communication Technologies, Systems, and Networks” (MUTSRC)

MODULE “SUBJECTS” (WINTER TERM)

The winter term in Spain is **from mid-September to mid-February.**

Each subject has 3 ECTS.

**ALL THE SUBJECTS ARE OFFICIALLY LECTURED IN SPANISH**

The student should choose 10 subjects out of 15 total subjects with no restriction

**Acronym meanings:**

* **S: Spanish**
* **E: English**

Observations:

* **Code: no. of code and official language of the course**
* Slides: the language of slides
* Exam writing: You can write your exam in E/S
* Exam wording: The wording of the exam is in E/S
* Classes. The teacher can change the official language to S: Spanish even if all the students understand English

 **E\*: English if all the students agree on it**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Code | Course title in English and Spanish | Cred. | Slides | Examswriting | Examswording | Classes |
| 30740**S** | Photonic technologies in wireless networks Tecnologías fotónicas en redes inalámbricas | 3 ECTS | E | E | E | E\* |
| 30752**S** | Internet of Things (IoT) platformsPlataformas IoT | 3 ECTS | E | E | E[[1]](#footnote-1) | E\* |
| 30751**S** | Implementation of content distribution networksImplantación de redes de distribución de contenidos | 3 ECTS | S | S | S | S |
| 30739**S** | Aerospace communications systems Sistemas de comunicaciones aeroespaciales  | 3 ECTS | S/E | S/E | S/E | S |
| 30747**S** | Design of quality service networksDiseño de redes con calidad de servicio  | 3 ECTS | S | S | S | S |
| 30738**S** | Next generation mobile communications networks Redes de comunicaciones móviles de nueva generación | 3 ECTS | E | E | E | E\* |
| 30748**S** | Architecture and protocols in mobile communications Arquitectura y protocolos en comunicaciones móviles | 3 ECTS | S/E | E | S | S |
| 30734**S** | Signal processing in wireless communicationsProcesado de señal en comunicaciones inalámbricas | 3 ECTS | S | E | E | S |
| 30737**S** | Electromagnetism in advanced materials designElectromagnetismo en el diseño de materiales avanzados | 3 ECTS | E/S | E | E | E\* |
| 35663**S** | WEB application development tools Herramientas para el desarrollo de Aplicaciones WEB  | 3 ECTS | S | S | S | S |
| 35666**S** | Systems virtualization Virtualización de sistemas | 3 ECTS | S  |  S/E |  S/E |  S |

**ALL THE SUBJECTS ARE OFFICIALLY LECTURED IN SPANISH**

**Acronym meanings:**

* **S: Spanish**
* **E: English**

Observations:

* **Code: no. of code and official language of the course**
* Slides: the language of slides
* Exam writing: You can write your exam in E/S
* Exam wording: The wording of the exam is in E/S
* Classes. The teacher can change the official language to S: Spanish even if all the students understand English

 **E\*: English if all the students agree on it**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **CODE** | **Course title in English and Spanish** | **Cred.** | **Slides** | **Exams****writing** | **Exams****wording** | **Classes** |
| 35669**S** | Digitalization in industry Digitalización en la industria | 3 ECTS | S | S | S | S |
| 35670**S** | Applications in mobile communications systemsAplicaciones en sistemas de comunicaciones móviles | 3 ECTS | E | E | E | E\* |
| 35671**S** | RADAR applicationsAplicaciones RADAR | 3 ECTS | E | E | E | E\* |

MODULE “SEMINARS” (SUMMER TERM)

The Seminar classes are lectured **from mid-February to late-April.**

Each seminar has 1 ECTS.

The student should select 6 out of 10 total seminars.

Acronym meanings:

* **S: Spanish**
* **E: English**

|  |  |  |
| --- | --- | --- |
| **CODE** | **Seminars in English** | **Cred.** |
| 34477**E** | Object localization with focus on RFID-based systems (ORFID) | 1 ECTS |
| 34478**E** | Modern antennas for vehicles and mobile devices (MAVB) | 1 ECTS |
| **CODE** | **Seminars in Spanish** | **Cred.**  |
| 35673**S** | Herramientas de monitorización de redes | 1 ECTS |
| 35674**S** | Sistemas de control de versiones GIT y GITHUB | 1 ECTS |
| 31970**S** | Redes de telecomunicación de nueva generación y eficiencia energética | 1 ECTS |
| 31967**S** | Sistemas sensores y redes inalámbricas de sensores | 1 ECTS |
| 31968**S** | Técnicas avanzadas de medida y automatización en RF | 1 ECTS |
| 35675**S** | Sistemas complejos y teoría del caos | 1 ECTS |
| 35672**S** | Tecnologías y sistemas para la gestión de aeronaves no tripuladas | 1 ECTS |
| 31674**S** | Caracterización y modelado del canal radio con aplicación a sistemas 5G-B5G, comunicaciones vehiculares e IoT | 1 ECTS |

3. MODULE “FINAL DEGREE THESIS” (SUMMER TERM)

The *Master's Thesis* comprises 24 ECTS and consists of a presentation and defense of an original exercise carried out individually before a university tribunal, involving a novel research project in one of the areas contemplated. To defend the Master's Thesis, the student must have passed all the credits of the study plan.

The Framework Document of the UPV establishes the relationship between the ECTS and the number of hours of face-to-face and non-face-to-face work that the student must endure. For all training activities, it is assumed that 1 ECTS is equivalent to 10 hours of face-to-face work and between 15 and 20 hours of non-face-to-face work (student's personal work).

The *Master's Thesis* can be defended in July or in September face-to-face or via videoconferencing.

|  |  |
| --- | --- |
| **CODE** |  |
| 31078 | Final degree thesis of Master in Telecommunication Technologies, Systems and Networks (24 ECTS, summer term) |

# Courses available for exchange students at the Degree 2319 “Master's Degree in Electronic Systems Engineering” (MUISE)

Usually, Laboratory and Practices take place in the mornings, and Theory lessons during the evenings.

NOTICE 1: DEADLINES: The students who want to apply for the Master’s Degree in Electronic Systems Engineering courses must apply and upload all the required documents in the AIRE system **before July 1st, 2024,** taking into account that the following will be used for their selection in the courses.

* CV
* Transcript of Records (ToR)
	+ If you are a BSc student, ToR of the BSc.
	+ If you are an MSc student, ToR of the previous BSc as well as ToR of the MSc level enclosed in a single pdf.

Students will know whether they are accepted or not around 24th July 2024.

NOTICE 2: LIMITED PLACES: Please check the number of places available for every course.

NOTICE 3: ACCOMMODATION ISSUES: If you want to take courses only in semester A for the 1st-year MUIT, MUTSRC, or MUISE, please take into account that the examination period takes place in February, and you will probably have no accommodation for such a short period.

| CODE(\* could change) | COURSE | SEMESTER | LANGUAGE | ECTS Credits | Places available |
| --- | --- | --- | --- | --- | --- |
| 34630 | Sistemas Integrados Digitales | B | ESP | 6 | 5 |
| 35548 | Electrónica de Equipos Audiovisuales | B | ESP | 6 | 5 |
| 34634 | Diseño Microelectrónico - SED | A | ESP | 6 | 5 |
| 35555 | Seminarios Profesionales y Conferencias | B | ESP | 6 | 5 |
| 35557 | Trabajo de Fin de Máster | A/B | ESP/ENG | 12 | No limit |

1. In case of any multiple-choice tests, those exams will be only in Spanish. [↑](#footnote-ref-1)