

## 表 GDAŃSK UNIVERSITY OF TECHNOLOGY

## Subject card

| Subject name and code                       | Social Aspects of Information Technology - Seminar, PG_00047445   |  |   |  |               |  |                   |               |  |
|---|---|--|---|--|---------------|--|-------------------|---------------|--|
| Field of study                              | Electronics and Telecommunications  |  |   |  |               |  |                   |               |  |
| Date of commencement of studies             |   |  | Academic year of realisation of subject   |  |               | 2024/2025  |                   |               |  |
| Education level                             | second-cycle studies  |  | Subject group   |  |               | Optional subject group<br>Humanistic-social subject group  |                   |               |  |
| Mode of study                               | Full-time studies   |  | Mode of de  | livery                                 |               | at the   | at the university |               |  |
| Year of study                               | 2   |  | Language  | Language of instruction                |               |  | English           |               |  |
| Semester of study                           | 3   |  | ECTS credits  |  |               | 1.0  | 1.0               |               |  |
| Learning profile                            | general academic profile  |  | Assessment form   |  |               | assessment   |                   |               |  |
| Conducting unit                             | Department of Metrology and Optoelectronics -> Faculty of Electronics, Telecommun   |  |   |  | munications a | and Informatics  |                   |               |  |
| Name and surname                            | Subject supervisor  | dr hab. inż. Marcin Gnyba                  |   |  |               |  |                   |               |  |
| of lecturer (lecturers)                     | Teachers  |  | prof. dr hab. inż. Małgorzata Szczerska<br>dr hab. inż. Marcin Gnyba  |  |               |  |                   |               |  |
| Lesson types and methods of instruction     | Lesson type   | Lecture                                    | Tutorial  | Laboratory                             | Projec        | t  | Seminar           | SUM           |  |
|   | Number of study hours   | 0.0  | 0.0   | 0.0                                    | 0.0           |  | 15.0              | 15            |  |
|   | E-learning hours inclu  |  |   |  |               | 1  |                   |               |  |
| Learning activity and number of study hours | Learning activity   | Participation in<br>classes includ<br>plan |   | Participation in<br>consultation hours |               | Self-study   |                   | SUM           |  |
|   | Number of study hours   |  |   | 1.0                                    |               | 9.0  |                   | 25            |  |
| Subject objectives                          | Development of knowledge, skills and attitudes of students in the domain of influence of information technologies on environment and society in the socjological, medical, legal and cultural aspects.  |  |   |  |               |  |                   |               |  |
| Learning outcomes                           | Course outcome  |  | Subject outcome   |  |               | Method of verification   |                   |               |  |
|   | [K7_W71] has general knowledge<br>in humanistic, social, economic or<br>legal sciences, including their<br>fundamentals and applications  |  | The student has basic knowledge<br>in the field of history,<br>telecommunications and computer<br>science, cybercrime, ethical<br>aspects of the use of information<br>techniques, personal data<br>security, medical and economic<br>aspects as well as socio-cultural<br>electromagnetic radiation. |  |               | [SW1] Assessment of factual knowledge  |                   |               |  |
|   | [K7_K71] is able to explain the<br>need to apply knowledge from<br>humanistic, social, economic or<br>legal sciences in order to function<br>in a social environment  |  | The student is aware of the<br>importance of non-technical<br>aspects and effects of engineering<br>activities, including the impact of<br>electronic and telecommunications<br>devices on the environment and<br>society.  |  |               | [SK2] Assessment of progress of work   |                   |               |  |
|   | [K7_U71] is able to apply<br>knowledge from humanistic,<br>social, economic or legal sciences<br>in order to solve problems   |  | The student is able to collect<br>information on the impact of<br>information technologies on the<br>environment and society as part of<br>cooperation in a student group<br>and correctly present them   |  |               | [SU2] Assessment of ability to<br>analyse information<br>[SU5] Assessment of ability to<br>present the results of task |                   |               |  |
| Subject contents                            | The history of communication technologies development and their impact on the evolution of civilization.<br>Health aspects of thermal effect induced by electromagnetic radiation. Benefits and risks for the psyche of<br>human being associated with the information technologies. Does media integrate people? Does media give<br>rise to strengthen people-to people links? Computer related crimes. Soft skills and digitized workplace. |  |   |  |               |  |                   |               |  |
| Prerequisites<br>and co-requisites          |   |  |   |  |               |  |                   |               |  |
| Assessment methods                          | Subject passin  | g criteria                                 | Pass  | ing threshold                          |               | Per  | centage of the    | e final grade |  |
| and criteria                                |   |  | 50.0%   |  |               | 100.0%   | -                 |               |  |

| Pecommended reading | Basic literature         | Com N. The Obelleurs Milestille Internet is Define to Ore Desi   |
|---------------------|--------------------------|--|
| Recommended reading |                          | Carr N.: <u>The Shallows: What the Internet Is Doing to Our Brains</u>   |
|                     |                          | (2010, W. W. Norton) <u>ISBN 978-0-393-07222-8</u>   |
|                     |                          |  |
|                     |                          |  |
|                     |                          | Bryx M.: Historia radia w Polsce. http//www.historiaradia.pl   |
|                     |                          |  |
|                     |                          |  |
|                     |                          | Kalisz J.: Szkodliwe pole elektromagnetyczne. Przyjaciel przy pracy 5/1993, str. 16-18, 6/1993, str. 16-17, 7-8/1993, str. 24-25 |
|                     |                          | 5/1995, Sti. 10-10, 0/1995, Sti. 10-17, 7-0/1995, Sti. 24-25   |
|                     |                          |  |
|                     |                          | Martin Blank, Overpowered: The Dangers of  |
|                     |                          | Electromagnetic Radiation (EMF) and What You Can Do  |
|                     |                          | about It,  |
|                     |                          |  |
|                     |                          | ISBN-13: 978-1609806200, ISBN-10: 1609806204, Seven Stories  |
|                     |                          | Press  |
|                     |                          |  |
|                     |                          |  |
|                     |                          |  |
|                     |                          | Mikołajczyk M.: Kryteria biologiczno-lekarskie dopuszczalnych natężeń  |
|                     |                          | pól elektromagnetycznych. VIII Krajowe Sympozjum Nauk Radiowych,   |
|                     |                          | Wrocław 1996, str. 281-285.  |
|                     |                          |  |
|                     |                          | Coodman M. Future Crimes Knonf Doubledov Dublishing  |
|                     |                          | Goodman M.: Future Crimes, Knopf Doubleday Publishing Group, 2015,   |
|                     |                          | Group, 2013,   |
|                     |                          |  |
|                     |                          | Castells M.: Rise of the Network Society, John Willey & Sons 2009  |
|                     |                          |  |
|                     |                          |  |
|                     |                          |  |
|                     |                          |  |
|                     | Supplementary literature | Given during lectures.   |
|                     | eResources addresses     | Adresy na platformie eNauczanie:   |
|                     |                          |  |

| -                     |  |
|-----------------------|--|
| Example issues/       |  |
| example questions/    |  |
| tasks being completed | Internet and mobile devices  |
|                       | Vision of the Internet of Things   |
|                       | Surveillance as an internet business model   |
|                       | "Artificial grass sowing" - astroturfing   |
|                       | Threats to privacy<br>Internet monitoring and surveillance of Internet users by state and international institutions       |
|                       | Internet threats for minors  |
|                       | Shortcomings of telephone operating systems  |
|                       | Mobile payments  |
|                       | Bitcoin - new opportunities and threats  |
|                       | Internet content protection by copyright   |
|                       | Censorship on the Internet   |
|                       | Quote right and Creative Commons license   |
|                       | Access to and dissemination of proprietary information (Wikileaks)<br>Innovations  |
|                       | Problems and legal regulations regarding the use of drones.  |
|                       | Criminal use of location data  |
|                       | Threats resulting from 3D printing technology  |
|                       | Social aspects of using artificial intelligence  |
|                       | A car without a driver - development perspectives  |
|                       | Development of electricity sources, social aspect  |
|                       | History<br>The history of development of communication techniques and their impact on the development of civilization      |
|                       | Polish code breakers - discuss the fate of Polish mathematicians: Jan Kowalewski, Stefan Mazurkiewicz,                     |
|                       | Wacław Sierpiński, Stanisław Leśniewski and the impact of their activities on the fate of the world.                       |
|                       | Jan Szczepanik - Polish television pioneer - discuss the activities of the Polish inventor and his influence on            |
|                       | the development of technology.   |
|                       | Dr. David Parkinson - the creator of flight radio direction finder - the role of the invention in the field of             |
|                       | defense and security.  |
|                       | The real price of a cell - about the construction, construction process and social aspects of mobile device                |
|                       | production.<br>Martin Cooper - the creator of the mobile phone - discuss the history of the creation of a mobile phone and |
|                       | its impact on the modern world.  |
|                       | Nobotushi Kihara - the creator of the walkman - discuss the history of the creation of portable music players              |
|                       | and their impact on personal contact with music.   |
|                       | Jacek Karpiński - creator of the K-202 computer - about the development of the hardware and software layer                 |
|                       | of computers in Poland and in the world.   |
|                       | Jack Tramiel - creator of Atari - about the construction, construction and development of consoles and video               |
|                       | games.<br>Edward Snowden - whistleblowers in a network society   |
|                       | cybercrime   |
|                       | Interpretation of computer crime by Polish and foreign law enforcement agencies.   |
|                       | Polish and foreign legal regulations describing computer crimes and ways of prosecuting them.                              |
|                       | The most common methods of making computer crimes.   |
|                       | Environment  |
|                       | Health aspects of the effect of thermal electromagnetic radiation  |
|                       | The impact of the computer on the user, psychological aspects<br>A man immersed in virtual reality                         |
|                       | Psychological aspects of the use of information technologies   |
|                       | Internet addiction   |
|                       | Negative psychological aspects of the use of technology  |
|                       | information.   |
|                       | Positive psychological aspects of the use of technology  |
|                       | information.   |
|                       | Does the use of information technology strengthens interpersonal   |
|                       | relations?   |
|                       |  |
|                       |  |
|                       |  |
| Work placement        | Not applicable   |
|                       |  |