University of Gdańsk

Subject card

Subject name and code	CRM Systems, PG_00177463		
Field of study	Informatics and Econometrics		
Date of commencement of studies	October 2026	Academic year of realisation of subject	2027/2028
Education level	Master's studies	Subject group	Obligatory subject group in the field of study Optional subject group Subject group related to scientific research in the field of study
Mode of study	full-time studies	Mode of delivery	at the university
Year of study	2	Language of instruction	English
Semester of study	3	ECTS credits	5.0
Learning profile	academic	Assessment form	credit
Conducting unit			
Name and surname of lecturer (lecturers)	Subject supervisor	dr Dorota Buchnowska, prof. UG	
	Teachers		

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	15.0	0.0	45.0	0.0	0.0	60

E-learning hours included: 0.0

Learning activity and number of study hours

Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM
Number of study hours	60	4.0	61.0	125

Subject objectives

Familiarizing students with:

- the principles of CRM strategy;
- types of IT solutions supporting CRM strategy;
- the tasks and functionality of systems supporting CRM;
- the use of AI in CRM solutions;
- development trends in CRM systems.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[IiEMU2_U03] Is able to obtain and verify data from properly selected sources and to collect, process, and visualize it using modern econometrics, informatics or statistics tools	The student is able to use CRM system functions to acquire, process, and utilize customer data in order to improve quality and increase the efficiency of processes, particularly in the areas of sales, marketing, and customer service.	[SU2] presentation/project/paper/ report [SU4] test/exam - oral or written
[IiEMU2_W04] Possesses a comprehensive understanding of the complex nature of human roles and behaviors in organizations or projects, both at the individual and group levels	The student knows and understands the needs of users and the organizational conditions related to the use of CRM systems and other IT solutions supporting customer relationship management, and identifies technological, organizational, and competency-related barriers and sources of resistance to the adoption of these solutions, including AI- and Agentic AI-based solutions.	[SW4] test/exam - oral or written [SW2] presentation/project/paper/ report
[IiEMU2_W05] Possesses advanced knowledge and understanding of informatics, statistics, and econometrics techniques and tools used to acquire, process, or visualise data to aid in decision-making and verify research hypotheses	(1) The student knows and understands the functionalities of CRM systems and other solutions supporting customer relationship management and explains their importance in implementing the company's strategy. (2) The student knows and understands the benefits and limitations of selected IT solutions for improving customer service. (3) The student knows and understands the concept of Agentic CRM and the possibilities of using AI agents in sales, marketing, and customer service. (4) The student knows and understands the development trends of IT systems in the areas of sales, marketing, and customer service.	[SW4] test/exam - oral or written
[IiEMU2_U12] Can adapt, design, create, and operate IT systems that support business entities	The student is able to configure, customize, and develop CRM systems to improve the efficiency of sales, marketing, and customer service processes using low-code platforms and AI-based solutions.	[SU2] presentation/project/paper/ report

Subject contents

Lecture

1. Principles of the CRM strategy.
2. IT tools supporting CRM strategy implementation. Integration of CRM with the IT ecosystem (ERP, Marketing Automation, e-Commerce, CDP).
3. The CRM systems market.
4. CRM systems architecture.
5. Sales-related tasks and functionality of CRM systems.
6. Customer service-related tasks and functionality of CRM systems.
7. Marketing-related tasks and functionality of CRM systems.
8. Data management and CDP (Customer Data Platform).
9. Application of AI in customer experience management – Generative AI and Agentic AI in CRM.
10. Trends in CRM system development.
11. CRM system implementation.

Computer Laboratory Exercises

1. System configuration and preparation for use.
2. Basic CRM functionality – managing accounts, contacts, and activities.
3. Working with a CRM system in the area of sales.
4. Working with a CRM system in the area of marketing.
5. Working with a CRM system in the area of after-sales customer service.
6. CRM system customization – managing settings and access rights, creating views, customizing forms, processes, and dashboards.
7. CRM system development:
   - creating forms, processes, dashboards, and applications;
   - building flows – automating tasks and processes in CRM systems and integrating CRM with other IT solutions;
   - integrating CRM with BI;
   - building and using AI models and agents in CRM systems.

<table>
<tr><td>Prerequisites and co-requisites</td><td colspan="2">Basic knowledge of the main types of management information systems.</td></tr>
<tr><td>Assessment methods and criteria</td><td colspan="2"><table>
<tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr>
<tr><td>the written test</td><td>51.0%</td><td>20.0%</td></tr>
<tr><td>semester project</td><td>51.0%</td><td>40.0%</td></tr>
<tr><td>tasks carried out during classes</td><td>51.0%</td><td>40.0%</td></tr>
</table></td></tr>
<tr><td rowspan="3">Recommended reading</td><td>Basic literature</td><td>Buchnowska D., Systemy CRM i analityka biznesowa, [w:] Wrycza S., Maślankowski J. (red.), Informatyka ekonomiczna. Teoria i zastosowanie, Wydawnictwo Naukowe PWN, Warszawa 2019

Buchnowska D., Systemy CRM [w:] Informatyka ekonomiczna, Wrycza S. (red.), PWE, Warszawa 2010

Stanusch M. , CRM. System czy strategia?, Business Readings, Gliwice 2025

Materials posted on the Educational Portal.</td></tr>
<tr><td>Supplementary literature</td><td>Gholam, V. V., Ultimate Microsoft Dynamics 365 CRM for enterprises: Unlock the power of Microsoft Dynamics 365 CRM to automate your business processes and drive digital transformation. Orange Education, 2025.

Harper E., Salesforce Data Cloud architect's handbook: Design, integrate, and activate customer data at scale (2nd ed.). AttributeValue, 2025.

Buchnowska D., Systemy CRM [w:] Informatyka ekonomiczna, Wrycza S. (red.), PWE, Warszawa 2010

Błażewicz G., Marketing Automation. W kierunku sztucznej inteligencji i hiperpersonalizacji, Wydawnictwo Naukowe PWN, Warszawa 2021.

Gartner, Magic Quadrant for CRM Customer Engagement Center (CEC), 2026;

Gartner, Magic Quadrant for CRM Sales Platforms, 2026;

Gartner, Magic Quadrant™ for B2B Marketing Automation Platforms, 2026</td></tr>
<tr><td>eResources addresses</td><td></td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td colspan="2"></td></tr>
<tr><td>Work placement</td><td colspan="2">Not applicable</td></tr>
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