



Subject card

Subject name and code	Databases in Transport Company Management, PG_00045214							
Field of study	Transport and Logistics, Transport and Logistics							
Date of commencement of studies	October 2020		Academic year of realisation of subject		2021/2022			
Education level	first-cycle studies		Subject group					
Mode of study	Full-time studies		Mode of delivery		at the university			
Year of study	2		Language of instruction		Polish			
Semester of study	3		ECTS credits		3.0			
Learning profile	general academic profile		Assessment form		assessment			
Conducting unit	Information Technology Unit -> Faculty of Ocean Engineering and Ship Technology							
Name and surname of lecturer (lecturers)	Subject supervisor Teachers		dr inż. Tacjana Niksa-Rynkiewicz					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar		
	Number of study hours	15.0	0.0	30.0	0.0	0.0		
	E-learning hours included: 0.0							
Learning activity and number of study hours	Adresy na platformie eNauczanie:							
	Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study				
	Number of study hours	45	5.0	25.0	75			
Subject objectives	<p>The aim of the course is to familiarize students with the possibilities of using programs and the procedures available in them during laboratory classes that enable:</p> <ul style="list-style-type: none">• designing knowledge systems,• creating relational databases,• creating simple sql queries using queries• creating forms and reports enabling printouts. <p>The software necessary to perform the tasks is Ms WORD, Ms Visio, Ms Access</p>							
Learning outcomes	Course outcome		Subject outcome		Method of verification			
	K6_U03		Mastering the skills of using Ms Visio Creating an ER schema using the Chen method and object-oriented method. Knowledge of the principles of creating a conceptual model of a relational database		[SU2] Assessment of ability to analyse information [SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools			
Subject contents	[K6_W04] has a basic knowledge in IT, electronics, automation and control, computer graphics useful to understand the possibilities of their application in transport		Mastering the ability to create a real database in the Ms Access environment Mastering design skills in the Ms Visio environment		[SW1] Assessment of factual knowledge			
	<p>Program content (subject of classes):</p> <ol style="list-style-type: none">1. Introduction to databases; discussion of literature and rigor of crediting. Basic concepts, the problem of redundancy, independence, integrity.2. File database - application, examples3. Relational database - relationship modeling4. ER scheme (Chen method)6. Data types in Access7. Relational model summary: concepts, dependencies and normalization, pros and cons of normalization.8. Database design - documentation9. ER scheme using the objective method10. Ms Access - creating databases, tables, relationships11. Ms Access - creating queries - queries12. Ms Access - creating queries - queries13. Ms Access - creating forms and reports14. Presentation and discussion of exemplary implemented database projects15. Presentation and discussion of exemplary implemented database projects							

Prerequisites and co-requisites	knowledge of the terminology of programming in English		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	project	60.0%	90.0%
	activity	50.0%	10.0%

Recommended reading	Basic literature	<p>Banachowski Lech: <i>Bazy danych. Tworzenie aplikacji.</i> Akademicka Oficyna Wydawnicza PLJ, Warszawa, 1998. ISBN 83-7101-377-9.</p> <p>Ullman, J.D., J. Widom: Podstawowy wykład z systemów baz danych. WN-T, Warszawa, 1999 (tłum. z języka ang., wyd. 1997). ISBN 83-204-2394-5.</p> <p>Boratyn Dariusz: <i>MS ACCESS 2.0. System, oblicze, ku aplikacjom.</i> Wydawnictwo CROMA, Wrocław, 1995. ISBN 83-86343-30-3.</p> <p>Boratyn Dariusz: <i>Microsoft Office ACCESS 97. System, oblicze, ku aplikacjom.</i> Wydawnictwo CROMA, Wrocław, 199. ISBN 83-86343-27-2.</p> <p>Cassel, O. i C. Eddy: <i>ACCESS 97. Baza danych dla każdego.</i> Wydawnictwo HELION, Gliwice, 1999. ISBN 83-7197-067-6.</p> <p>Kopertowska M. i Ł. Jaroszewski: <i>Ćwiczenia z bazy danych ACCESS 97.</i> EDU-MIKOM, Warszawa, 1997. ISBN 83-87102-031-8.</p> <p>Kopertowska M. Europejskie Komputerowe Prawo Jazdy. Bazy Danych. (ECDL). ZNI MIKOM, Warszawa, 1999. ISBN 83-87102-62-8.</p> <p>Kuciński K.: <i>Poznajemy Accessa. Wszystko co chciałeś wiedzieć o MS ACCESS ale nie miałeś kogo zapytać.</i> Wyd. Edition 2000, Kraków 1999, ISBN 83-87297-50-X.</p> <p><i>Microsoft Access 2.0 – krok po kroku.</i> Oficyna Wydawnicza READ ME, Warszawa, 1994. ISBN 83-85769-86-2.</p> <p><i>Microsoft Access 97 – krok po kroku.</i> Wydawnictwo RM, Sp. Z o.o., Warszawa, 1997. ISBN 83-87216-09-7.</p> <p>Norton, P., V. Andersen: <i>Microsoft ACCESS 2000 PL. Programowanie według Petera Nortona..</i> ZNI MIKOM, Warszawa, 2000. ISBN 83-7279-058-2.</p> <p>Nowakowska M. i E. Zając: <i>Access. Programowanie aplikacji.</i> EDU-MIKOM, Warszawa, 1998. ISBN 83-87102-57-1.</p> <p>Palmer S.: <i>Access 2 dla opornych.</i> Oficyna Wydawnicza READ ME, Warszawa, 1995. ISBN 83-7147-017-7.</p> <p>Prague C.N., M.R. Irwin: <i>Access 97 Biblia,</i> RM, Warszawa, 1998.</p> <p>Simpson, A. i E. Olson: <i>Access 97.</i> Wydawnictwo HELION, 1988. ISBN 83-86718-99-4.</p> <p>Barker, R.: <i>CASE*Method – modelowanie związków encji.</i> WNT, 1996.</p> <p>Jaszkiewicz A.: <i>Inżynieria oprogramowania.</i> Wydawnictwo HELION, Gliwice, 1997. ISBN 83-7197-007-2.</p> <p>Yourdon, E.: <i>Współczesna analiza strukturalna.</i> WNT, Warszawa, 1996. ISBN 83-204-2067-9.</p>
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Supplementary literature	Teoria baz danych
	Benyon-Davies, P.: <i>Systemy baz danych</i> . WNT, Warszawa, 1998. ISBN 83-204-2257-4.
	Cellary W. i Z. Królikowski: <i>Wprowadzenie do projektowania baz danych. dBase III</i> . WNT, Warszawa, 1988. ISBN 83-204-1089-4.
	Connolly, T. C. Begg: <i>Database Systems: A Practical Approach to Design, Implementation and Management</i> . Addison-Wesley Longman, 1998. ISBN 0201342871.
	Date, C.J.: <i>Wprowadzenie do baz danych</i> . WNT, Warszawa, 1981.
	Date, C.J.: <i>An Introduction to Database Systems</i> . Sixth Edition. Reading: Addison-Wesley Publishing Company, 1995 (planowane tłumaczenie w WNT).
	Delobel,C. i M.Adiba: <i>Relacyjne bazy danych</i> . WNT, Warszawa, 1989. ISBN 83-204-1025-8.
	Elmasri, R. and S. B. Navathe: <i>Fundamentals of Database Systems</i> . The Benjamin/Cummings Publishing Company, Inc. Redwood City California, 1994. ISBN 0-8053-1753-8.
	Figura Dariusz: <i>Obiektowe bazy danych</i> . Akademicka Oficyna Wydawnicza PLJ, Warszawa, 1996. ISBN 83-7101-336-1.
	Harris, W.: <i>Bazy danych nie tylko dla ludzi biznesu</i> . WNT, Warszawa, 1994. ISBN 83-204-1678-7.
	Hernandez, M.J.: <i>Bazy danych dla zwykłych śmiertelników</i> . EDU-MIKOM, Warszawa, 1998. ISBN 83-87102-52-0.
	Kim Won: <i>Wprowadzenie do obiektowych baz danych</i> . WNT, Warszawa, 1996. ISBN 83-204-2026-1.
	Muraszkiewicz, M. i H. Rybiński: <i>Bazy danych</i> . Akademicka Oficyna Wydawnicza PLJ, Warszawa, 1993.
	Pankowski Tadeusz: <i>Podstawy baz danych</i> . Wydawnictwo Naukowe PWN, Warszawa, 1992. ISBN 83-01-10570-4.
	Riordan R.M.: Projektowanie systemów relacyjnych baz danych. Microsoft Press/Wydawnictwo RM, Warszawa, 2000. ISBN 83-7243-103-5.
	Ullman, J.D.: <i>Systemy baz danych</i> . WNT, Warszawa, 1988. ISBN 83-204-0914-4.
	Ullman, J.D. and J. Widom: <i>A First Course in Databases</i> . Prentice Hall, 1997 (istnieje tłumaczenie w WNT).
	ORACLE Austin Dave: <i>Poznaj Oracle 8</i> . (Prosto profesjonalnie). ZNI MIKOM, Warszawa, 1999. ISBN 83-7158-153-X.

	<p>Rogers, U.: Oracle. Przewodnik projektanta baz danych. WNT, Warszawa, 1995.</p> <p>Wrembel, R. I W. Wieczerzycki: <i>Projektowanie aplikacji bazy danych Oracle</i>. Wydawnictwo NAKOM, Poznań, 1997. ISBN 83-86969-07-5. ISSN 0867-6011.</p> <p>SQL</p> <p>Celko J.: SQL Zaawansowane techniki programowania. Mikom, Warszawa, 1999. ISBN 83-7158-221-8.</p> <p>Date, C.J. and H. Darwen: <i>A Guide to SQL Standard</i>. Addison-Wesley, 1994.</p> <p>Gruber M.: <i>SQL – znakomity podręcznik opisujący najnowszy standard SQL-a</i>. Wydawnictwo HELION, Gliwice, 1996. ISBN-83-86718-32-3.</p> <p>Harrington, J.L.: <i>SQL dla każdego</i>. EDU-MIKOM, Warszawa, 1998. ISBN 83-87102-55-5.</p> <p><i>SQL – Język relacyjnych baz danych</i>. WNT, Warszawa, 1995. ISBN 83-204-1806-2.</p> <p>Stephens, R.K. et al.: <i>SQL w 3 tygodnie</i>. LT&P, Warszawa, 1999. ISBN 83-87115-13-4.</p>
eResources addresses	
Example issues/ example questions/ tasks being completed	<p>TASK: Please propose an entity relationship diagram to remember: planned and carried out cruises, club members and their stages, yachts together with their sailing possibilities (waters they can swim on) for the presented sailing club The sailing club creates a database to facilitate the completion of crews for planned cruises. The yacht-club owns yachts with various nautical (sailing) possibilities, which can sail on various waters. Also, club members - sailors - have different qualifications, allowing them to perform various functions on various cruises. These qualifications are strictly defined by each sailor's degree, confirmed by a patent with a unique number.</p>
Work placement	Not applicable