

## SDAŃSK UNIVERSITY 的 OF TECHNOLOGY

## Subject card

Subject name and code	Laminate Yacht Canstruction, PG_00056250							
Field of study	Design and Construction of Yachts							
Date of commencement of studies	October 2021		Academic year of realisation of subject			2022/2023		
Education level	first-cycle studies		Subject group			Obligatory subject group in the field of study		
						Subject group related to practical vocational preparation		
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			2.0		
Learning profile	practical profile		Assessment form			assessment		
Conducting unit	Zakład Projektowania Okrętów i Robotyki Podwodnej -> Institute of Ocean Engineering and Ship Technology -> Faculty of Mechanical Engineering and Ship Technology							
Name and surname	Subject supervisor		dr hab. inż. Lech Rowiński					
of lecturer (lecturers)	Teachers		dr inż. Artur Karczewski					
Lesson types and methods	Lesson type	Lecture	Tutorial	Laboratory	Projec	t	Seminar	SUM
of instruction	Number of study hours	30.0	0.0	0.0	0.0		0.0	30
	E-learning hours included: 0.0							
Learning activity and number of study hours	Learning activity	y Participation in didac classes included in s		Participation in consultation hours		Self-study SUM		SUM
	Number of study 30 hours		4.0		16.0		50	
	Provide student with knowledge regarding design principles of yacht hull structures made of composites referenced to procurement of structures and calculations based on rules of classification societies							
Subject objectives	Provide student with I referenced to procure	knowledge rega ment of structu	arding design p ires and calcula	l principles of yad ations based o	cht hull : n rules o	structur of classi	es made of cor ification societi	nposites es
Subject objectives Learning outcomes	Provide student with I referenced to procure Course out	knowledge rega ment of structu	arding design p ires and calcula Subj	I principles of yac ations based o ect outcome	cht hull s n rules d	structur of class	es made of cor ification societi Method of verit	nposites es fication
Subject objectives Learning outcomes	Provide student with I referenced to procure Course out K6_W05	knowledge reg ment of structu come	arding design p rres and calcula Subj Student know design of reint structures and between desig manufacturing	I principles of yad ations based o ect outcome s principles of forced plastic d relationships gn and process g of the structure	cht hull s n rules of ses of res	structur of classi [SW1] J knowle	es made of con ification societi Method of verif Assessment of dge	nposites es fication factual
Subject objectives Learning outcomes	Provide student with I referenced to procure Course out K6_W05 K6_U05	knowledge rega ment of structu come	arding design p rres and calcula Subj Student know design of reint structures and between desig manufacturing Student is abl regarding defi requirements structure base standards	rinciples of yad ations based o ect outcome s principles of forced plastic d relationships gn and process g of the structur e to define a ta nition of to composite h ed on indicated	cht hull a n rules o ses of res ask null	[SW1] / knowle	es made of con ification societi Method of verin Assessment of dge Assessment of owledge gained	ability to d from the
Subject objectives Learning outcomes	Provide student with I referenced to procure Course out K6_W05 K6_U05 K6_U06	knowledge reg ement of structu	Arding design p rres and calcula Subj Student know design of reint structures and between desig manufacturing Student is abl regarding defi requirements structure base standards Student is abl geometry) of a structure folloo Polish Registe	rinciples of yad ations based o ect outcome s principles of forced plastic d relationships gn and process g of the structur e to define a ta nition of to composite h ed on indicated e to design (de an element of s wing requireme er of Ships	cht hull s n rules of res ask hull efine ship ents of	Structure of classi [SW1] / knowle [SU3] / use kno subject [SU1] / fulfilme	es made of con ification societi Method of verif Assessment of dge Assessment of owledge gained t	nposites es fication factual ability to d from the task
Subject objectives Learning outcomes Subject contents	Provide student with I referenced to procure Course out K6_W05 K6_U05 K6_U05 K6_U06 Review and the selec construction with the principles in designing constructions. Techno Technological gear at Investigation of the ef and finishing works. T norms. Seminary: The the technological gea	tion of non-me technology in c g process. Bas ologies of formin d tools. Techn fectiveness of rechnological r e composite ing r Contac formin	Arding design p rres and calcula Subj Student know design of rein structures and between desig manufacturing Student is abl regarding defi requirements structure base standards Student is abl geometry) of a structure follow Polish Register tal materials ap omposite cons c constructiona ng the element ological materi the technologic equirements re geredients and g Vacuum forr	L rinciples of yad ations based o ect outcome s principles of forced plastic d relationships gn and process g of the structur e to define a ta nition of to composite h ed on indicated e to design (de an element of s wing requireme er of Ships oplied in shippin tructions. Revia al calculations. ta calculations. ta calculations. ta calculations. ta process. Th sulting from that technologial re- ming and infusi	cht hull s n rules of ses of res ask hull efine ship ents of consi e comple e comple comple e comple ask	[SW1] / knowle [SW3] / use kno subject [SU1] / fulfilme tructions onstruct chnologi rom reir of the te letation s of class s of class	es made of con ification societi Method of verif Assessment of dge Assessment of owledge gained t Assessment of ent s. The relations ional joints and ical process of nforced resins. echnological pro sof construction softy compa chnological Pro- rming with the	ability to d from the task ship of the tak composite occess. nal elements nies and eparation of injection
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Recommended reading	Basic literature	<ol> <li>Berger M. i inni: Poliestry wzmocnione w budownictwie okrętowym, Wydawnictwo Morskie, Gdynia, 1961.</li> <li>Kozłowski J., Wilczopolski M., Wituszyński K.: Konstrukcje okrętowe z kompozytów polimerowych; Wydawnictwo Morskie, Gdańsk, 1982.</li> <li>Przepisy klasyfikacji i budowy jachtów morskich (JAC), Część II, Kadłub 1996/1998</li> <li>Przepisy klasyfikacji i budowy łodzi motorowych (MOT). Część II.</li> </ol>
	Supplementary literature	<ol> <li>Pizepisy klasynkacji i budowy łodzi motorowych (NOT), Część II, Kadłub 1996/1998</li> <li>Pielichowski J., "Technologia tworzyw sztucznych", Wydawnictwo Naukowo-Techniczne , wyd VI, 2003.</li> <li>Rabek J., "Współczesna wiedza o polimerach", wyd PWN, Warszawa 2009</li> </ol>
	eResources addresses	Podstawowe https://www.r-g.de/ - https://gardner.dragonforms.com-CompositesWorldmagazine - Uzupełniające Adresy na platformie eNauczanie: Konstrukcja jachtu laminatowego 22/23 - Moodle ID: 26132 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=26132
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	