Hochschule Bremen
City University of Applied Sciences

Transcript of Records

Last name:	Mahmud
First name:	S. M. Firoj
Gender:	male
Date of birth:	08/20/1992
Place of birth:	Barisal
Student ID:	5057900
Degree programme:	Electronics Engineering M.Sc.

ACADEMIC RESULTS

Course code	Course title	Term	Local grade (1)	ECTS credits (2)	Status (3)
1.1	Measurement and Instrumentation	winter 2022/23	3.2	6	BE
(MIN)	Measurement and Instrumentation - Written examination/Experimental task *	winter 2022/23	3.2		BE
1.1	Stochastic Signals and Systems	winter 2022/23	2.5	6	BE
(SSS)	Stochastic Signals and Systems - Written examination/Experimental task *	winter 2022/23	2.5		BE
1.2	Laser Systems and Applications	winter 2022/23	2.4	6	BE
(LSA)	Laser Systems and Applications - Written examination/Experimental task *	winter 2022/23	2.4		BE
1.6	Communication Networks *	winter 2022/23			PV
(CNE)	Communication Networks - Written examination/Experimental task *	winter 2022/23	5.0		NB
1.7	Optical Communications	winter 2022/23	2.6	6	BE
(OCO)	Optical Communications - Written examination/Experimental task *	winter 2022/23	2.6		BE
1.9	Image Processing and Pattern Recognition	winter 2022/23	3.5	6	BE
(IPPR)	Image Processing and Pattern Recognition - Written examination/Experimental task *	winter 2022/23	3.5		BE
2.6	Advanced Topics of Lasers	winter 2022/23	1.5	6	BE
(ATL)	Advanced Topics of Lasers - Written examination/Experimental task *	winter 2022/23	1.5		BE
1.12 / 2.12	Projectmanagement and Teambuilding	winter 2022/23	1.3	6	BE
(PMT)	Projectmanagement and Teambuilding 1+2 - Project work *	winter 2022/23	1.3		BE
1.14 / 2.14	Language Modul German	winter 2022/23	1.3	6	BE
(LMG)	Language Modul German - Written examination/Oral examination *	winter 2022/23	1.3		BE

ACADEMIC RESULTS

Course code	Course title	Term	Local grade (1)	ECTS credits (2)	Status (3)
2.1	Computer Aided Data Acquisition	winter 2022/23	1.3	6	BE
(CADA)	Computer Aided Data Aquisition - Written examination/Experimental task *	winter 2022/23	1.3		BE
2.2	Fiber Optic Test and Measurement	winter 2022/23	1.9	6	BE
(FOTM)	Fiber Optic Test and Measurement - Written examination/Experimental task *	winter 2022/23	1.9		BE
current average grade (excluding thesis and colloquium)			2.1	60	

Thesis
Thesis title: Design, Implementation and Verification of an Obstacle Avoidance System for Collision-Free Movement of a Robot

Course code	Course title	Term	Local grade (1)	ECTS credits (2)	Status (3)
(MTHESIS)	Master Thesis	summer 2023	1.3		BE
(MKOLLOQ)	Master Thesis Colloquium	summer 2023	1.3		BE

This certificate is computer-generated and is valid without signature.

(1) Description of HSB's grading system

Assessment key		
Local grade	Definition	
1.0 to 1.5	very good:	outstanding performance with only minor errors
1.6 to 2.5	good:	above the average standard but with some errors
2.6 to 3.5	satisfactory:	generally sound work with a number of notable errors
3.6 to 4.0	sufficient:	fair but with significant shortcomings/ performance meets the minimum criteria
5.0	fail:	more work required before the credit can be awarded

(2) All courses will be worth 3 to 6 credits according to the European Credit Transfer and Accumulation System (ECTS). 3 credits are equivalent to a student workload of 2-3 teaching units of 45 minutes each plus proportional additional self-learning per week. 6 credits are equivalent to a student workload of 4-6 teaching units of 45 minutes each plus proportional additional self-learning per week.

1 full academic year	=	60 ECTS
1 semester	=	30 ECTS
1 ECTS credit	=	25 to 30 hours workload

(3) Status (Explanation for the abbreviations used)

BE / ++	=	passed
NB / - -	=	failed
EN	=	failed and no resits possible
AN	=	registered for examination
PV/KV	=	incomplete

* Asterisk notes: external courses which have been recognised as a valid equivalent