

Swapnil Subhash Pawar

Vettersstraße 70/225

09126 Chemnitz

Herrn

Studierendenservice

Technische Universität Chemnitz · Studierendenservice · D-09107 Chemnitz Aktenzeichen: 748027

> Gebäude: Straße der Nationen 62

A10.043 Raum:

+49 371 531-33333 Telefon: Fax: +49 371 531-12129

studierendenservice@tu-chemnitz.de E-Mail:

Internet: www.tu-chemnitz.de/studierendenservice

Ort, Datum: Chemnitz, 06.02.2024

Immatrikulationsbescheinigung

Herr Swapnil Subhash Pawar, geboren am 24.07.1997 in Maharashtra, India, Matrikelnummer 748027, ist als Student an der Technischen Universität Chemnitz im Sommersemester 2024 immatrikuliert als Haupthörer und nicht beurlaubt.

Angestrebter Abschluss / Studienform	Studiengang / Studienfächer	Studientyp	Fachsemester / Regelstudienzeit
Master / Konsekutiver Master	Embedded Systems	Vollzeit	4/4

Semesterdauer: Sommersemester 01.04. bis 30.09. / Wintersemester 01.10. bis 31.03.

Diese Bescheinigung wurde maschinell erstellt und ist ohne Unterschrift gültig. Änderungen und zusätzliche Bemerkungen sind nur in Verbindung mit Unterschrift und Siegel gültig.

Verifikationsnummer: uvUjmsmAZJmc

Zur Verifikation dieser Bescheinigung rufen Sie bitte folgende Webadresse auf: https://campus.tu-chemnitz.de/verifizieren

> Dienst- u. Paketanschrift: Technische Universität Chemnitz · Studierendenservice Straße der Nationen 62 · 09111 Chemnitz

Postanschrift: Technische Universität Chemnitz · 09107 Chemnitz · GERMANY



Zentrales Prüfungsamt

Technische Universität Chemnitz · ZPA · D-09107 Chemnitz

Herrn Swapnil Subhash Pawar Vettersstraße 70/225 09126 Chemnitz

Aktenzeichen: 748027

Bearbeiter:

Veikko Pippig

Gebäude:

Reichenhainer Str. 70, C-Bau

Raum:

C009

Telefon: Fax:

+49 371 531-35639

+49 371 531-77709

E-Mail: Internet:

zpa@tu-chemnitz.de www.tu-chemnitz.de/zpa/

Ort, Datum:

Chemnitz, 26.03.2024

Sehr geehrter Herr Pawar,

in dem von Ihnen studierten Studiengang Master Embedded Systems an der Technischen Universität Chemnitz ist im Rahmen des Wahlpflichtmoduls ein 20-wöchiges Praktikum vorgesehen.

Die Wahl des Praktikums steht Ihnen noch frei.

Mit freundlichen Grüßen

Veikko Pippig

Zentrales Prüfungsamt

ECHNISCHE UNIVERSITÄT CHEMNITZ Zentrales Prüfungsamt 09107 Chemnitz

TECHNISCHE UNIVERSITÄT IN DER KULTURHAUPTSTADT EUROPAS CHEMNITZ

Zentrales Prüfungsamt

Transcript (of records)

Surname: Pawar Student ID: 748027 First name: Swapnil Subhash Date of birth: 07/24/1997

Degree: Master PO-Version: 2020

Course of study: Embedded Systems Date: 04/29/2024

Module / Exam number	Title of modules/course unit	Type of exam ¹	Grade ²	Status³	Cre- dits
	Basismodule	MG			26
1.1.1	Digital Components and Architectures for Data Processing	M	4.0	BE	5
42614	Digital Components and Architectures for Data Processing	PL	4.0	BE	5
42615	Digital Components and Architectures for Data Processing - Praktikum	PVL		BE	
1.1.2	Smart Sensor Systems	M		AB	
42010	Smart Sensor Systems - Praktikum	PVL		BE	
1.1.3	Digital Signal Processing 1	M		AB	
1.1.4	Computer Vision 1	M		AB	
41227	Computer Vision 1	PL	5.0	NB	
1.1.5	Design of Software for Embedded Systems	M	3.3	BE	5
56505	Design of Software for Embedded Systems	PL	3.3	BE	5
56507	Design of Software for Embedded Systems - Übungsaufgaben	PVL		BE	
1.1.7	Project Lab Embedded Systems	M	1.7	BE	6
42026	Project Lab Embedded Systems	PL	1.7	BE	6
42027	Project Lab Embedded Systems - Projektplan	PVL		BE	
1.2.1	Design of Digital Systems	M	3.0	BE	5
42601	Design of Digital Systems	PL	3.0	BE	5
42612	Design of Digital Systems - Praktikum	PVL		BE	
1.2.2	Hardware/Software-Codesign I	M	3.3	BE	5
55507	Hardware/Software-Codesign I	PL	3.3	BE	5
	Vertiefungsmodule	MG			10
	Module 2.1.1-2.5.3	TMG			10
2.1.3	Hardware/Software-Codesign II	M	3.0	BE	5
55509	Hardware/Software-Codesign II	PL	3.0	BE	5



Module / Exam number	Title of modules/course unit	Type of exam ¹	Grade ²	Status³	Cre- dits
	Advanced Platforms for Automotive Systems	M	5.0	MNB	
55511	Advanced Platforms for Automotive Systems	PL	5.0	NB	
2.2.2	Automotive Sensor Systems	M	2.5	BE	5
42003	Automotive Sensor Systems	PL	2.0	BE	
42004	Automotive Sensor Systems - Technischer Bericht	PL	3.0	BE	

At present, you have achieved 36 out of 120 credit points.



Transcript (of records) - Explanation

¹ Type of exam:

MG Group of modules
TMG Subgroup of modules

M Module
AA Thesis
PL Examination

ASL Exam is credited when passed

PVL Qualification for admission examination (without grade)

² Grading scheme used at Chemnitz University of Technology:

1,0 – 1,5 Very good

1,6 - 2,5 Good

2,6-3,5 Satisfactory 3,6-4,0 Sufficient

5.0 Non-sufficient/failed

3 Status

AB Module not completed

BE Passed

MNB Module failed

NB Failed

EN Failed/expulsion

VEN Temporarily failed/expulsion

VO Completed ZU Registered

freeCodeCamp(A)

This certifies that

Swapnil Subhash Pawar

successfully completed the

Machine Learning with Python

Developer Certification on March 24, 2024 representing approximately 300 hours of work



Dorsol

Quincy Larson
Executive Director, freeCodeCamp.org

Verify this certification at:

https://freecodecamp.org/certification/Swapnil_Pawar/machine-learning-with-python-v7







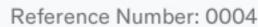
CERTIFICATE OF COMPLETION

The Complete Python Bootcamp From Zero to Hero in Python

Instructors Jose Portilla

Swapnil Subhash Pawar

Date March 15, 2024 Length 22 total hours





CERTIFICATE OF COMPLETION

ISO 26262 Crash Course: Functional Safety Mastery

Instructors Paul Danci

Swapnil Subhash Pawar

Date **Sept. 10, 2023** Length **4 total hours**



TCS/EMP/1711878

SERVICE CERTIFICATE

This is to certify that Mr. Swapnil Subhash Pawar was employed by us and his particulars of service are as under:

1. Name : Mr. Swapnil Subhash Pawar

2. Designation : Systems Engineer

3. Department : Computer Consultancy

4. Gross Annual Compensation : Rs. 411821/-

5. Date of Joining : June 24, 2019

6. Date of Leaving : July 5, 2022

7. Reason for Leaving : Resigned

Dated: July 27, 2022

Mallocl

Milind Lakkad

Executive Vice President & Global Head - Human Resources

TATA CONSULTANCY SERVICES

Tata Consultancy Services Limited

TCS House Raveline Street 21 D S Marg Fort Mumbai 400 001 India
Tel 91 22 6778 9999 Fax 91 22 6778 9000 e-mail corporate.office@tcs.com website www.tcs.com
Registered Office 9th Floor Nirmal Building Nariman Point Mumbai 400 021
Corporate Identification No. (CIN): L22210MH1995PLC084781



Savitribai Phule Pune University

(formerly University of Pune)

Telephone: 020 - 25621376 / 77 Web: www.unipune.ac.in

He/She has obtained following marks at the said examination.

TRANSCRIPT

Ganeshkhind, PUNE-411007.

(P.R.NO.71612759J)

e-mail: transcript@unipune.ac.in

This is to certify that MR./MS. PAWAR SWAPNIL SUBHASH Mother's Name: SUSHMA (SEAT NO. B150333132) has appeared for the BACHELOR OF ENGINEERING (ELECTRONICS & TELECOMMU.) (71) (2015 PAT.) examination of this University held in APR/MAY 2019 and is declared to have passed the said examination in FIRST CLASS with CGPA: 7.55.

CODE	SUBJECT	d examination.			CREDIT	./1012/33	(3)
45 18	F.E. SEAT NO. F150330303 MAY 2016			тот.	EARN.		GP.
				CRD	CRD	A PARTIE	DISTRICT.
107001	ENGINEERING MATHEMATICS I			05	05	0	50
107002	ENGINEERING PHYSICS			05	05	A+	45
110003	FUNDAMENTALS OF PROG. LANG.I			02	02	A	16
104012	BASIC ELECTRONICS ENGG.			04	04	A	32
101005	BASIC CIVIL AND ENV. ENGG.			04	04	A+	36
102006	ENGINEERING GRAPHICS I			04	04	0	40
111007	WORKSHOP PRACTICES			01	01	0	10
107008	ENGINEERING MATHEMATICS II			04	04	A	32
107009	ENGINEERING CHEMISTRY			05	05#	A	40-
110010	FUNDAMENTALS OF PROG. LANG.II		THE PROPERTY PROPERTY PROPERTY	02	02	A+	18
101011	ENGINEERING MECHANICS			05	05	A	40
103004	BASIC ELECTRICAL ENGG.			04	04	A+	36
102013	BASIC MECHANICAL ENGG.			04	04	A	32
102014	ENGINEERING GRAPHICS II		그 생생	01	01	0	10
	SGPA	: 8.74	TOTAL CREDITS	EARNE	D:50		
PHU	S.E. SEAT NO. S150333240 OCT 2017			тот.	EARN.	GRD	GP.
	THE UTILIZATION IN THE			CRD	CRD	327	18 21
204181	SIGNALS & SYSTEMS		TH	03	03	B+	21
204181	SIGNALS & SYSTEMS		TW	01	01	0	10
204182	ELECTRONIC DEVICES & CIRCUITS		TH	04	04\$	Č	20
204182	ELECTRONIC DEVICES & CIRCUITS		PR	01	01	A	08
204183	ELECTRIC CIRCUITS & MACHIN		TH	03	03	В	18
204183	ELECTRIC CIRCUITS & MACHIN		TW	01	01	0	10
204184	DATA STRUCTURES & ALGORITHMS		TH	04	04	C	20
204184	DATA STRUCTURES & ALGORITHMS		OR	01	01	A+=	09
204185	DIGITAL ELECTRONICS		TH	04	04	B+	28
204185	DIGITAL ELECTRONICS		PR	01	01	A	08
204186	ELECTRO MEAS INSTRU & TOOLS		TW	02	02	A+	18
204192	AUDIT COURSE-I		TW	00	00	P	00
204187	INTEGRATED CIRCUITS		TH	04	04	A	SA 32
204187	INTEGRATED CIRCUITS		TW+PR	01	01	A	08
204188	CONTROL SYSTEMS		TH THE	03	03	A	24
204189	ANALOG COMMUNICATION		TH	03	03	B+	21
204189	ANALOG COMMUNICATION		PR.	01	01	В	06
204190	OBJECT ORIENTED PROGRAMMING		TH TH	03	03	C	15
204190	OBJECT ORIENTED PROGRAMMING		OR OR	02	02	В	12
204191	EMPLOYABILITY SKILL DEVELOP		TW	03	03	0	30
204193	AUDIT COURSE-II	FIGAL SHULE	TWANTERS TWANT	00	00	P	3 00
207005	ENGINEERING MATHEMATICS III		THSALL	04	04	В	24
207005	ENGINEERING MATHEMATICS III		TW	01	01	0	10
51112	SGPA	: 7.04	TOTAL CREDITS				ERGIT





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Savitribai Phule Pune University

(formerly University of Pune)

Telephone: 020 - 25621376 / 77 Web: www.unipune.ac.in

TRANSCRIPT

Ganeshkhind, PUNE-411007.

e-mail: transcript@unipune.ac.in

	T.E. SEAT NO. T150333255 OCT/NOV 2018		TOT.	EARN.	GRD	GP.
			CRD	CRD		
304181	DIGITAL COMMUNICATION	TH	03	03	P	12
304182	DIGITAL SIGNAL PROCESSING	TH	03	03	В	18
304183	ELECTROMAGNETICS	TH	04	04	P	16
304184	MICROCONTROLLERS	TH	03	03	В	18
304185	MECHATRONICS	TH	03	03	A+	27
304191	SIGN. PROC. & COMM. LAB	TW	01	01	A+	09
304191	SIGN. PROC. & COMM. LAB	PR	G1	01	В	06
304192	MICROCON. & MECHATRONICS LAB	TW	01	01	A+	09
304192	MICROCON. & MECHATRONICS LAB	PR	01	01	A	08
304193	ELECTRONICS SYSTEM DESIGN	OR	03	03	A+	27
304217B	CYBER AND INFORMATION SECURITY	AC	00	00	P	00
304186	POWER ELECTRONICS	TH	03	03	B+	21
304187	INFO.THEORY CODING & COMM. N/W	TH	04	04	A	32
304188	BUSINESS MANAGEMENT	TH	03	03	B+	21
304189	ADVANCED PROCESSORS	TH	03	03\$	C	15
304190	SYSTEM PROG. & OPERATING SYS.	TH	03	03	A	24
304194	POWER & ITCI LAB	TW	01	01	0	10
304194	POWER & ITCI LAB	PR	01	- 01	A+	09
304195	ADV. PRCSR. & SYS. PROG. LAB	TW	01	01	0	10
304195	ADV. PRCSR. & SYS. PROG. LAB	PR PR	01	01	A	08
304196	EMPLOY, SKILLS & MINI PROJ.	OR	03	03	0	30
304198A	EMBD. SYS. DESI. USING MSP430	AC	00	00	P	00
	SGPA : 7.17	TOTAL CREDITS	The second secon		AITRIB	A BANGLE

	B.E. SEAT NO. B150333132 APR/MAY 2019		TOT.	EARN.	GRD	GP.
	BN 현실 및 10명 및		CRD	CRD		
404181	VLSI DESIGN & TECHNOLOGY	TH	03	03	В	18
404182	COMPUTER NETWORKS & SECURITY	TH	04	04	P	16
404183	RADIATION & MICROWAVE TECHNI.	TH	03	03	В	18
404184C	EMBEDDED SYSTEMS & RTOS	TH	03	03	B+	2!
404185B	ELECTRONICS PRODUCT DESIGN	TH	03	03	B+	21
404186	LAB PRACTICE -I (CNS+ RMT)	TW	01	01	0	10
404186	LAB PRACTICE -I (CNS+ RMT)	OR	01	01	0	10
404187	LAB PRACTII (VLSI + ELE. I)	TW	01	01	0	10
404187	LAB PRACTII (VLSI + ELE. I)	PR	01	01	0 4	10
404188	PROJECT STAGE I	OR	02	02	A+ =	18
404196B	HUMAN BEHAVIOUR	AC	00	00	P	00
404189	MOBILE COMMUNICATION	TH	03	03	B	18
404190	BROADBAND COMM. SYSTEMS	TH	04	04	B+	28
404191A	MACHINE LEARNING	THE PARTY OF THE PARTY OF THE	03	03	P	12
404192D	ADV. AUTOMOTIVE ELECTRONICS	TH	03	03	B+	21
404193	LAB PRACTICE III (MC+BCS)	TW .	01	01	A+	09
404193	LAB PRACTICE III (MC+BCS)	PR	01	01	A+	09
404194	LAB PRAC. IV (ELECTIVE III)	OR OR	01	01	A+ -	09
404195	PROJECT STAGE II	TW!	04	04	0	40
404195	PROJECT STAGE II	OR OR	02	02	A+	18
404196C	TEAM BLDG., LDRSP. & FITNESS	AC	00	00	P	5 00
	SGPA : 7.1	8 TOTAL CREDITS	EARNED	: 44	E UNIVE	RSITUS

FE SGPA: 8.74 SE SGPA: 7.04 TE SGPA: 7.17
TOT GP/TOT CREDITS: 1435/190 CGPA: 7.55 FIRST CLASS
AWARD OF DEGREE: ON THE BASIS OF PERFORMANCE FROM SEMESTER I TO VIII
DURATION OF COURSE: 04 YEARS AFTER 10+2 (HSC)

(PP-PAPER, PR PRACTICAL, TW-TERM WORK, OR-ORAL) (MEDIUM OF INSTRUCTION: ENGLISH)

REF.NO:EXAM./TRANS./BEN220221004 DATE:21/02/2022 TOV DIRECTOR

BOARD OF EXAMINATIONS & EVALUATION.



\$\$#@cc@#\$\$**\$\$#@cc@#\$\$**\$\$#@cc@#\$\$**\$\$#@cc@#\$\$**\$\$#@cc@#\$\$**\$\$#@cc@#\$\$**\$\$#@cc@#\$\$**\$\$#@cc@#\$\$**\$\$#@cc@#\$\$**