Technische Universität Chemnitz · Studierendenservice · D-09107 Chemnitz

Aktenzeichen:	748027

Herrn
Swapnil Subhash Pawar
Vettersstraße 70/225
09126 Chemnitz

Gebäude:	Straße der Nationen 62
Raum:	A10.043
Telefon:	+49 371 531-33333
Fax:	+49 371 531-12129
E-Mail:	studierendenservice@tu-chemnitz.de
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

TECHNISCHE UNIVERSITÄT
IN DER KULTURHAUPTSTADT EUROPAS
CHEMNITZ

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:	+49 371 531-35639
Fax:	+49 371 531-77709
E-Mail:	zpa@tu-chemnitz.de
Internet:	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

TECHNISCHE UNIVERSITÄT
CHEMNITZ
Zentrales Prüfungsamt
09107 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:	04/30/2024

Module / Exam number	Title of modules/course unit	Type of exam[1]	Grade[2]	Status[3]	Cre-dits
	Basismodule	**MG**			**32**
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**	**4.0**	**BE**	**6**
42009	Smart Sensor Systems	PL	4.0	BE	6
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**

Module / Exam number	Title of modules/course unit	Type of exam[1]	Grade[2]	Status[3]	Cre-dits
55509	Hardware/Software-Codesign II	PL	3.0	BE	5
2.2.1	**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 42 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(🔥)

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

Quincy Larson

Executive Director, freeCodeCamp.org

Verify this certification at:

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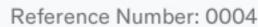
udemy

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**

udemy

CERTIFICATE OF COMPLETION

ISO 26262 Crash Course: Functional Safety Mastery

Instructors **Paul Danci**

Swapnil Subhash Pawar

Date **Sept. 10, 2023**

Length **4 total hours**

![TATA]

TCS/EMP/1711878

<u>SERVICE CERTIFICATE</u>

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

Milind Lakkad
Executive Vice President & Global Head - Human Resources

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*

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.

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

(P.R.NO.71612759J)

CODE	SUBJECT		TOT. CRD	EARN. CRD	GRD	GP.
	F.E. SEAT NO. F150330303 MAY 2016					
107001	ENGINEERING MATHEMATICS I		05	05	O	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	O	40
111007	WORKSHOP PRACTICES		01	01	O	10
107008	ENGINEERING MATHEMATICS II		04	04	A	32
107009	ENGINEERING CHEMISTRY		05	05#	A	40
110010	FUNDAMENTALS OF PROG. LANG.II		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		01	01	O	10

SGPA : 8.74   **TOTAL CREDITS EARNED : 50**

CODE	SUBJECT		TOT. CRD	EARN. CRD	GRD	GP.
	S.E. SEAT NO. S150333240 OCT 2017					
204181	SIGNALS & SYSTEMS	TH	03	03	B+	21
204181	SIGNALS & SYSTEMS	TW	01	01	O	10
204182	ELECTRONIC DEVICES & CIRCUITS	TH	04	04$	C	20
204182	ELECTRONIC DEVICES & CIRCUITS	PR	01	01	A	08
204183	ELECTRIC CIRCUITS & MACHIN	TH	03	03	B	18
204183	ELECTRIC CIRCUITS & MACHIN	TW	01	01	O	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	32
204187	INTEGRATED CIRCUITS	TW+PR	01	01	A	08
204188	CONTROL SYSTEMS	TH	03	03	A	24
204189	ANALOG COMMUNICATION	TH	03	03	B+	21
204189	ANALOG COMMUNICATION	PR	01	01	B	06
204190	OBJECT ORIENTED PROGRAMMING	TH	03	03	C	15
204190	OBJECT ORIENTED PROGRAMMING	OR	02	02	B	12
204191	EMPLOYABILITY SKILL DEVELOP	TW	03	03	O	30
204193	AUDIT COURSE-II	TW	00	00	P	00
207005	ENGINEERING MATHEMATICS III	TH	04	04	B	24
207005	ENGINEERING MATHEMATICS III	TW	01	01	O	10

SGPA : 7.04   **TOTAL CREDITS EARNED : 50**

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

Code	Subject		TOT. CRD	EARN. CRD	GRD	GP.
304181	DIGITAL COMMUNICATION	TH	03	03	P	12
304182	DIGITAL SIGNAL PROCESSING	TH	03	03	B	18
304183	ELECTROMAGNETICS	TH	04	04	P	16
304184	MICROCONTROLLERS	TH	03	03	B	18
304185	MECHATRONICS	TH	03	03	A+	27
304191	SIGN. PROC. & COMM. LAB	TW	01	01	A+	09
304191	SIGN. PROC. & COMM. LAB	PR	01	01	B	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	O	10
304194	POWER & ITCI LAB	PR	01	01	A+	09
304195	ADV. PRCSR. & SYS. PROG. LAB	TW	01	01	O	10
304195	ADV. PRCSR. & SYS. PROG. LAB	PR	01	01	A	08
304196	EMPLOY. SKILLS & MINI PROJ.	OR	03	03	O	30
304198A	EMBD. SYS. DESI. USING MSP430	AC	00	00	P	00

SGPA : 7.17   **TOTAL CREDITS EARNED : 46**

B.E. SEAT NO. B150333132 APR/MAY 2019

Code	Subject		TOT. CRD	EARN. CRD	GRD	GP.
404181	VLSI DESIGN & TECHNOLOGY	TH	03	03	B	18
404182	COMPUTER NETWORKS & SECURITY	TH	04	04	P	16
404183	RADIATION & MICROWAVE TECHNI.	TH	03	03	B	18
404184C	EMBEDDED SYSTEMS & RTOS	TH	03	03	B+	21
404185B	ELECTRONICS PRODUCT DESIGN	TH	03	03	B+	21
404186	LAB PRACTICE -I (CNS+ RMT)	TW	01	01	O	10
404186	LAB PRACTICE -I (CNS+ RMT)	OR	01	01	O	10
404187	LAB PRACT.-II (VLSI + ELE. I)	TW	01	01	O	10
404187	LAB PRACT.-II (VLSI + ELE. I)	PR	01	01	O	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	TH	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	01	01	A+	09
404195	PROJECT STAGE II	TW	04	04	O	40
404195	PROJECT STAGE II	OR	02	02	A+	18
404196C	TEAM BLDG., LDRSP. & FITNESS	AC	00	00	P	00

SGPA : 7.18   **TOTAL CREDITS EARNED : 44**

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)
ENTRY POINT: 10+2(HSC)   GRADUATION: 16 YEARS

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

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

DIRECTOR
BOARD OF EXAMINATIONS & EVALUATION.