

Government of Maharashtra
GOVERNMENT POLYTECHNIC, NAGPUR
(An Autonomous Institute of Govt. of Maharashtra)

Curriculum Equivalence
2016 To 2023
&
2021 To 2023



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GOVERNMENT POLYTECHNIC, NAGPUR
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No. GPNG/CDC/Equivalence/2024/6514
Dt. 25/09/2024

Subject: - Equivalence between courses of 2016 curriculum to the NEP aligned 2023 curriculum and 2021 curriculum to the NEP aligned 2023.

Reference: No. GPNG/CDC/Equivalence/2024/5973 Dt. 05/09/2024

As per the referred letter Institute Level Equivalence and Exemption Committee was formed to decide the followings.

1. To grant exemptions to First Year Courses of NEP aligned 2023 Curriculum based on XII Science passed students admitted in First year.
2. To grant exemptions to Direct Second year admitted students.
3. To prepare guidelines for switchover cases from 2016 and 2021 curriculum to NEP aligned 2023 curriculum.
4. To confirm the program wise equivalence between courses of 2016 and 2021 curriculum to NEP aligned 2023 curriculum on the basis of equivalence report from HODs.

The committee has submitted the report attached herewith.

Enclosure: Equivalence Document

(Dr. M. B. Daigavane)
Principal

Government Polytechnic, Nagpur

Copy to:

1. All HODs for information and necessary action
2. Controller of Examination for information and necessary action

Guidelines for Switch Over Cases from 2016 Curriculum to NEP aligned 2023 Curriculum and 2021 Curriculum to NEP aligned 2023 Curriculum

Following guidelines should be followed for switchover cases from 2016 Curriculum to NEP aligned 2023 Curriculum and 2021 Curriculum to NEP aligned 2023 Curriculum.

1. Students should be switched over in NEP aligned 2023 Curriculum in both odd and even term.
2. If a student is switched over from 2016 or 2021 to NEP aligned 2023 curriculum, then all norms of NEP aligned 2023 curriculum will be applicable to candidate.
3. If the student has passed a course in 2016 or 2021 curriculum, then due credits of equivalent course of NEP aligned 2023 Curriculum should be applicable.
4. If the student has failed in respective course of 2016 or 2021 curriculum, then he/she has to appear for examination as per examination scheme of equivalent course of NEP aligned 2023 curriculum.
5. The 2016 and 2021 Curriculum has following heads:
 - i. Theory (TH) - Term End Examination (TEE)
 - ii. Theory (TH) - Continuous Assessment (CA)
 - iii. Practical (PR) - Term End Examination (TEE)
 - iv. Practical (PR) - Continuous Assessment (CA)

And

The NEP aligned 2023 Curriculum has following heads:

- i. Classroom Learning (CL) – Summative Assessment (SA)
- ii. Classroom Learning (CL) – Formative Assessment (FA)
- iii. Tutorial Learning (TL) / Laboratory Learning (LL) - Summative Assessment (SA)
- iv. Tutorial Learning (TL) / Laboratory Learning (LL) - Formative Assessment (FA)
- v. Self-study Learning (SL) – Summative Assessment (SA)

The marks obtained in heads of 2016 curriculum should be proportionally converted into heads of NEP aligned 2023 curriculum as shown below:

- i. Theory - Term End Examination (TEE) to Classroom Learning (CL) – Summative Assessment (SA)
- ii. Theory - Continuous Assessment (CA) to Classroom Learning (CL) – Formative Assessment (FA)
- iii. Practical - Term End Examination (TEE) to Tutorial Learning (TL) / Laboratory Learning (LL) - Summative Assessment (SA)
- iv. Practical - Continuous Assessment (CA) to Tutorial Learning (TL) / Laboratory Learning (LL) - Formative Assessment (FA)

22	AM404E	Design of RCC Structure	6	AM301H	Design of Structures	3	Equivalent
23	AM405E	Design of Steel Structure	5				
24	CE401E	Advanced Surveying	4	CE252H	Advanced Surveying	4	Equivalent
25	CE402 E	Building Construction	5	CE102H	Building Construction	3	Equivalent
26	CE403E	Hydraulics	5	CE301H	Hydraulics	3	Equivalent
27	CE404 E	Estimating & Costing	5	CE351H	Estimating and Costing	3	Equivalent
28	CE405 E	Transportation Engineering	5	CE202H	Highway Engineering	2	Equivalent
29	CE406 E	Water Resources Engineering	5	CE304H	Water Resources Engineering	3	Equivalent
30	CE407 E	Environmental Engineering	5	CE305H	Environmental Engineering	3	Equivalent
31	CE408 E	Building Services	2	CE303H	Building Services	3	Equivalent
32	CE409 E	Contracts, Accounts & Valuation	2	CE306H	Contracts and Accounts	3	Equivalent
33	CE410E	Road Project	2	-	-	-	No Equivalence
34	AM406 E / CE412E	Industrial Project	2	CE352H	Capstone Project	2	Equivalent
35	SE401E	Seminar	1	-	-	-	No Equivalence
36	ID401E / ID402E	Industrial Training OR Industrial Practices	1	IN251H	Basic Internship	4	Equivalent
37	AM501E	Advanced Structural Analysis	5	AM303H	Advanced Design of Structure	3	Equivalent
38	AM502E	Foundation Engineering	5	-	-	-	No Equivalence
39	AM503E	Advanced Concrete Technology	5	AM302H	Advanced Concrete Technology	3	Equivalent
40	CE501E	Advanced Construction Equipments	5	-	-	-	No Equivalence
41	CE502E	Maintenance of Structures	5	CE203H	Maintenance and Repairs of Structure	4	Equivalent
42	CE503E	Low Cost Housing	5	-	-	-	No Equivalence

- v. Practical - Continuous Assessment (CA) to Self-study Learning (SL) – Summative Assessment (SA)
6. If in 2016 or 2021 curriculum the course has only TH-TEE and TH-CA and in NEP aligned 2023 curriculum the equivalent course has CL-SA, CL-FA, LL-SA, LL-FA and SL-SA heads then, the marks obtained in heads of 2016 curriculum should be proportionally converted into heads of NEP aligned 2023 curriculum as shown below:
- Theory - Term End Examination (TEE) to Classroom Learning (CL) – Summative Assessment (SA) and Tutorial Learning (TL) / Laboratory Learning (LL) - Summative Assessment (SA).
 - Theory - Continuous Assessment (CA) to Classroom Learning (CL) – Formative Assessment (FA) and Tutorial Learning (TL) / Laboratory Learning (LL) - Formative Assessment (FA)
 - Theory - Continuous Assessment (CA) to Self-study Learning (SL) – Summative Assessment (SA)

However, in such cases minimum 40% mark in LL-FA and SL-SA head should be allotted.

7. If in 2016 or 2021 curriculum the course has only PR-TEE and PR-CA heads and in NEP aligned 2023 curriculum the equivalent course has CL-SA, CL-FA, LL-SA, LL-FA and SL-SA heads then, the marks obtained in heads of 2016 curriculum should be proportionally converted into heads of NEP aligned 2023 curriculum as shown below:
- Practical - Term End Examination (TEE) to Classroom Learning (CL) – Summative Assessment (SA) and Tutorial Learning (TL) / Laboratory Learning (LL) - Summative Assessment (SA).
 - Practical - Continuous Assessment (CA) to Classroom Learning (CL) – Formative Assessment (FA) and Tutorial Learning (TL) / Laboratory Learning (LL) - Formative Assessment (FA)
 - Practical - Continuous Assessment (CA) to Self-study Learning (SL) – Summative Assessment (SA)

However, in such cases minimum 40% mark in LL-FA and SL-SA head should be allotted.

8. If a student has passed a course in 2016 or 2021 curriculum, however equivalent course is not included in NEP aligned 2023 curriculum, then the credits acquired in 2016 or 2021 curriculum of that course will be nullified.
9. Candidate detained in a course 2016 or 2021 curriculum will have to re-register for equivalent course of NEP aligned 2023 curriculum.
10. CPS Candidate should not be switched over in NEP aligned curriculum

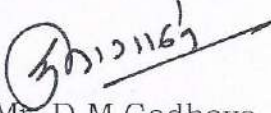
2023 till his/ her punishment period is over.

11. CPS should be dealt as fail, provided CPS punishment period is over at the time of switch over.
12. While converting marks from curriculum 2016 or 2021 to NEP aligned 2023 curriculum any fractional marks should be converted into next higher integer digit. for example, 40.01 to 41.
13. If two courses of 2016 or 2021 curriculum combined together are equivalent to one course of NEP aligned 2023 Curriculum, then the student should have passed in two courses of 2016 or 2021 curriculum to get equivalence, otherwise student should have to register for equivalent course in NEP aligned 2023 Curriculum. While converting marks in such cases the average of respective heads of two courses should be considered as mentioned in 5,6,7 whichever is applicable.
14. The question papers of all courses of curriculum 2016 should not be printed after publication of this document.
15. The question papers of all equivalent courses of 2021 curriculum will be given to students of 2016 curriculum, if any.
16. If student passes a course of 2016 or 2021 curriculum which has two equivalent courses in NEP aligned 2023 curriculum, then marks should be allotted in proportion in both equivalent courses of NEP aligned 2023 curriculum and due credits should be given for both courses of NEP aligned 2023 curriculum.
17. Exemption should be granted to **all courses of first semester and second semester** of all programs to direct second year admitted students.
18. Exemption should be granted to Courses listed in annexure V of First Semester and Second Semester courses of NEP aligned 2023 Curriculum for First Year admitted students having HSC Science Qualification.
19. For all switchover cases Students should fill "ECM" format and program should fill "STF" format (attached herewith) and submit to controller of examination within stipulated time period.

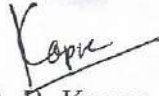
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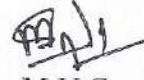
1. Equivalence of Courses between 2016 curriculum to NEP aligned 2023 Curriculum. (Annexure I)
2. Equivalence of Courses between 2021 curriculum to NEP aligned 2023 Curriculum. (Annexure II)

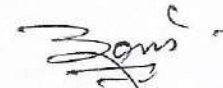
3. Equivalence of 2016 Free Elective Courses with NEP aligned 2023 Generic Elective Courses.(Annexure III)
4. Equivalence of 2021 Open Elective Courses with NEP aligned 2023 Generic Elective Courses. (Annexure IV)
5. Exemption of Courses of First Semester and Second Semester as per NEP aligned 2023 Curriculum for First Year admitted students having HSC Science Qualification.(Annexure V)


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Program: Civil Engineering

Annexure-I

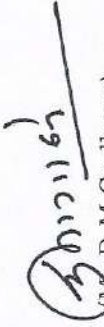
Equivalence of Courses 2016 to 2023 Curriculum

Sr. No.	Courses in 2016 Curriculum			Courses in NEP Aligned 2023 Curriculum			Remarks
	Course Code	Course Name	Credits	Course Code	Course Name	Credits	
1	EN101E	English	4	EN151H	Business Communication	2	Equivalent
2	EN102E	Communication Skills	4	EN101H	Communication Skills	3	Equivalent
3	CE101E	Construction Management	4	IN301H	Industrial Management (Common Course)	1	Equivalent
4	EV101 E	Environmental Science	2	VE251H	Environmental Sustainability	2	Equivalent
5	RD101E	Rural Development	1	-	-	-	No Equivalence
6	CA201 E	Computer Application	2	CM151H	Basics of Computer	2	Equivalent
7	PH201E	Engineering Physics	5	PH101H	Applied Physics	4	Equivalent
8	CH203E	Applied Chemistry	5	CH101H	Applied Chemistry	4	Equivalent
9	MH201E	Engineering Mathematics	5	MH101H	Basic Mathematics	4	Equivalent
10	MH202E	Applied Mathematics	5	MH102H	Applied Mathematics	4	Equivalent
11	ME301 E	Engineering Graphics	4	ME152H	Engineering Graphics (Civil)	3	Equivalent
12	WS301E	Workshop Practice	2	CE151H	Civil Engineering Workshop Practice	2	Equivalent
13	AM301E	Engineering Mechanics	5	AM101H	Engineering Mechanics	3	Equivalent
14	CE 301 E	Basic Surveying	5	CE201H	Surveying	3	Equivalent
15	CE302 E	Building Drawing	4				
16	CE411 E	Application Of CAD	2	CE251H	Building Drawing with CAD	3	Equivalent
17	CE303E	Construction Materials	4	CE101H	Construction Materials	2	Equivalent
18	AM302 E	Strength of Materials	6	AM201H	Mechanics of Structures	3	Equivalent
19	AM401 E	Theory Of Structures	5	AM204H	Theory of Structures	3	Equivalent
20	AM402E	Concrete Technology	3	AM202H	Concrete Technology	3	Equivalent
21	AM403E	Geotechnical Engineering	3	AM203H	Geotechnical Engineering	4	Equivalent

43	FS501E	Finishing School	2	VE151H	Integrated Personality Development	2	Equivalent
				VE152H	Advanced Personality Development	2	


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Program: Civil Engineering

Annexure-II

Equivalence of Courses 2021 to 2023 Curriculum

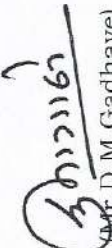
Sr. No.	Courses in 2021 Curriculum			Courses in NEP Aligned 2023 Curriculum			Remarks
	Course Code	Course Name	Credits	Course Code	Course Name	Credits	
1	EN101G	English	3	EN101H	Communication Skills	3	Equivalent
2	MH101G	Basic Mathematics	4	MH101H	Basic Mathematics	4	Equivalent
3	CH101G	Chemistry	4	CH101H	Applied Chemistry	4	Equivalent
4	IT151G	Introduction to IT Systems	2	CM151H	Basics of Computer	2	Equivalent
5	AM101G	Engg. Mechanics	4	AM101H	Engineering Mechanics	3	Equivalent
6	EV151G	Environmental Science	0	VE251H	Environmental Sustainability	2	Equivalent
7	IC151G	Indian Constitution	0	VE351H	Indian Constitution	1	Equivalent
8	LS151G	Life Skills	1	VE151H	Integrated Personality Development	2	Equivalent
9	MH102G	Applied Mathematics	4	VE152H	Advanced Personality Development	2	
10	PH101G	Physics	4	MH102H	Applied Mathematics	4	Equivalent
11	EN151G	Business Communication	2	PH101H	Applied Physics	4	Equivalent
12	CE101G	Construction Materials	4	EN151H	Business Communication	2	Equivalent
13	CE151G	Elements of Civil Engineering	1	CE101H	Construction Materials	2	Equivalent
14	AM102G	Concrete Technology	4	-----			No Equivalence
15	WS151G	Engineering Workshop Practice	2	AM202H	Concrete Technology	3	Equivalent
16	ME101G	Engg. Graphics	3	CE151H	Civil Engineering Workshop Practice	2	Equivalent
17	AM202G	Mechanics of Structures	4	ME152H	Engineering Graphics (Civil)	3	Equivalent
18	CE201G	Transportation Engineering	4	AM201H	Mechanics of Structures	3	Equivalent
19	AM203G	Geotechnical Engineering	4	CE202H	Highway Engineering	2	Equivalent
20	CE202G	Building Construction	4	AM203H	Geotechnical Engineering	4	Equivalent
				CE102H	Building Construction	3	Equivalent

21	CE204G	Basic Surveying	5	CE201H	Surveying	3	Equivalent
22	CE203G	Building Drawing	4	CE251H	Building Drawing with CAD	3	Equivalent
23	CE251G	CAD in Civil Engineering	1				
24	AM204G	Theory of Structures	4	AM204H	Theory of Structures	3	Equivalent
25	CE207G	Advanced Surveying	5	CE252H	Advanced Surveying	4	Equivalent
26	CE208G	Advanced Construction Equipment	4		--		No Equivalence
27	CE211G	Low Cost Housing	4		--		No Equivalence
28	AM205G	Precast and Prestressed Concrete	4		--		No Equivalence
29	AM206G	Earthquake Resistant Buildings	4		--		No Equivalence
30	CE209G	Estimating, Costing & Valuation	5	CE351H	Estimating and Costing	3	Equivalent
31	CE212G	Contracts & Accounts	4	CE306H	Contracts and Accounts	3	Equivalent
32	CE210G	Hydraulics	4	CE301H	Hydraulics	3	Equivalent
33	CE301G	Environmental Engineering	4	CE305H	Environmental Engineering	3	Equivalent
34	CE303G	Water Resources Engineering	5	CE304H	Water Resources Engineering	3	Equivalent
35	CE306G	Construction Management	3	IN301H	Industrial Management (Common Course)	1	Equivalent
36	AM301G	Design of Structures (RCC & Steel)	6	AM301H	Design of Structures	3	Equivalent
37	CE307G/ AM304G	Project	2	CE352H	Capstone Project	2	Equivalent
38	ES351G	Entrepreneurship and Startup	3	IN353H	Entrepreneurship & Startup (Common Course)	1	Equivalent
39	CE304G	Maintenance of Structure	4	CE203H	Maintenance and Repairs of Structure	4	Equivalent
40	CE305G	Solid Waste Management	4	CE302H	Solid Waste Management	3	Equivalent
41	AM302G	Advanced Design of Structure	4	AM303H	Advanced Design of Structure	3	Equivalent
42	AM303G	Advanced Concrete Technology	4	AM302H	Advanced Concrete Technology	3	Equivalent

43	IN351G	Internship	15	IN251H	Basic Internship	4	Equivalent
				IN351H	Internship (Seminar)	6	
				IN352H	Internship (Report Writing)	6	


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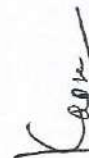
Annexure-I

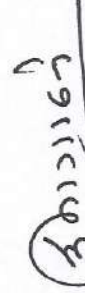
Equivalence of Courses 2016 to 2023 Curriculum

S.N.	Courses in 2016 Curriculum			Courses in NEP Aligned 2023 Curriculum			Remarks
	Course code	Course name	Credits	Course Code	Course Name	Credits	
1	EN101E	English	4	EN101H	Communication Skills	3	Equivalent
2	EN102E	Communication Skills	4	EN151H	Business Communication	2	Equivalent
3	MN101E	Industrial Organization & Management	4	IN301H	Industrial Management	1	Equivalent
4	EV101E	Environmental Science	2	VE251H	Environmental Sustainability	2	Equivalent
5	RD101E	Rural Development	1	-	-	-	Not Equivalent
6	CA201E	Computer Applications	2	CM151H	Basics of Computer	2	Equivalent
7	PH201E	Engineering Physics	5	PH101H	Applied Physics	4	Equivalent
8	CH201E	Applied Chemistry	5	CH101H	Applied Chemistry	4	Equivalent
9	MH201E	Engineering Mathematics	5	MH101H	Basic Mathematics	4	Equivalent
10	MH202E	Applied Mathematics	5	MH102H	Applied Mathematics	4	Equivalent
11	ME301E	Engineering Graphics	4	ME151H	Engineering Graphics (Mechanical)	3	Equivalent
12	WS301E	Workshop Practice	2	WS151H	Engineering Workshop Practice (Mechanical)	2	Equivalent
13	AM301E	Engineering Mechanics	5	AM101H	Engineering Mechanics	3	Equivalent
14	EE304E	Elements of Electrical Technology	5	EE103H	Basic Electrical and Electronics	3	Equivalent
15	EC303E	Electronics & Mechatronics	5				
16	MT 303E	Mechanical Engineering Materials	5	ME251H	Mechanical Materials and	2	Equivalent

							Maintenance			
17	ME303E	Thermal Engineering		4	ME201H		Thermal Engineering	3	Equivalent	
18	ME401E	Engineering Drawing		4	ME101H		Engineering Drawing	2	Equivalent	
19	AM407E	Strength of Material		5	AM206H		Strength of Materials	3	Equivalent	
20	ME402E	Machine Drawing		5	ME202H		Machine Drawing	3	Equivalent	
21	ME403E	Theory of Machine		4	ME205H		Theory of Machines	3	Equivalent	
22	WS401E	Manufacturing Processes		5	WS251H		Manufacturing Processes	3	Equivalent	
23	ME404E	Production Technology		3	ME304H		Production Technology	3	Equivalent	
24	ME405E	Internal Combustion Engine		4	ME206H		Power Engineering	4	Equivalent	
25	ME406E	Fluid Power		4	ME204H		Fluid Power	4	Equivalent	
26	WS402E	Advance Manufacturing Processes		4	ME303H		Advanced Manufacturing Process	3	Equivalent	
27	ME407E	Machine Design		5	ME305H		Machine Design	3	Equivalent	
28	ME408E	Refrigeration & Air Conditioning		4	ME208H		Refrigeration and Air Conditioning	4	Equivalent	
29	ME409E	CNC Machines		3	ME306H		CNC Technology and Robotics	3	Equivalent	
30	ME410E	Computer Aided Drafting		3	ME351H		CAD / CAM	3	Equivalent	
31	ME411E	CAD / CAM		4	ME351H		CAD / CAM	3	Equivalent	
32	ME412E	Metrology and Quality Control		2	ME202H		Metrology and Quality Control	4	Equivalent	
33	ME413E	Mechanical Measurement		2	ME203H		Mechanical Measurement	3	Equivalent	
34	ME414E	Industrial Project		2	ME352H		Capstone Project	2	Equivalent	
35	SE401E	Seminar		1	-		-	-	No Equivalence	

36	ID401E/ ID402E	Industrial Training/Industrial Practices	1	IN251H	Basic Internship	4	Equivalent
37	ME501E	Renewable Energy Sources	5	ME309H	Renewable Energy Sources	3	Equivalent
38	ME502E	Industrial Automation	5	ME308H	Automation in Production	3	Equivalent
39	ME503E	Heat & Mass Transfer	5	-	-	-	NoEquivalent
40	ME504E	Computer Integrated Manufacturing	5	ME308H	Automation in Production	3	Equivalent
41	ME505E	Industrial Fluid Power	5	ME301H	Industrial Fluid Power	3	Equivalent
42	ME506E	Material Handling & Management	5	-	-	-	Not Equivalent
43	ME507E	Automobile Engineering	5	ME307H	Automobile Engineering	3	Equivalent
44	FS501E	Finishing School	2	VE151H	Integrated Personality Development	2	Equivalent
				VE152H	Advanced Personality Development	2	

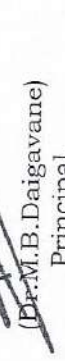

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Program: Mechanical Engineering

Annexure-II

Equivalence of Courses 2021 to 2023 Curriculum

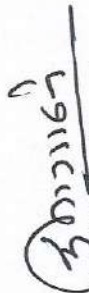
S.N.	Courses in 2021 Curriculum			Courses in NEP Aligned 2023 Curriculum			Remarks
	Course code	Course name	Credits	Course Code	Course Name	Credits	
1	MH101G	Basic Mathematics	4	MH101H	Basic Mathematics	4	Equivalent
2	ME101G	Engineering Graphics	3	ME151H	Engineering Graphics (Mechanical)	3	Equivalent
3	CH101G	Chemistry	4	CH101H	Applied Chemistry	4	Equivalent
4	EN101G	English	3	EN101H	Communication Skills	3	Equivalent
5	IT151G	Introduction to IT Systems	2	CM151H	Basics of Computer	2	Equivalent
6	LS151G	Life Skills	1	VE151H	Integrated Personality Development	2	Equivalent
7	EV151G	Environmental Science	---	VE152H	Advanced Personality Development	2	
8	IC151G	Indian Constitution	---	VE251H	Environmental Sustainability	2	Equivalent
9	MH102G	Applied Mathematics	4	VE351H	Indian Constitution	1	Equivalent
10	EX101G	Fundamentals of Electrical & Electronics	5	MH102H	Applied Mathematics	4	Equivalent
11	PH101G	Physics	4	EE103H	Basic Electrical and Electronics	3	Equivalent
12	AM101G	Engineering Mechanics	4	PH101H	Applied Physics	4	Equivalent
13	ME203G	Engineering Drawing	4	AM101H	Engineering Mechanics	3	Equivalent
14	EN151G	Business Communication	2	ME101H	Engineering Drawing	2	Equivalent
15	WS151G	Engineering Workshop Practice	2	EN151H	Business Communication	2	Equivalent
				WS151H	Engineering Workshop Practice (Mechanical)	2	Equivalent

16	ME201G	Thermal Engineering		4	ME201H	Thermal Engineering	3	Equivalent
17	AM201G	Strength of Material		4	AM206H	Strength of Materials	3	Equivalent
18	ME202G	Machine Drawing		4	ME202H	Machine Drawing	3	Equivalent
19	ME204G	Measurement and Metrology		5	ME203H	Mechanical Measurement	3	Equivalent
20	WS201G	Manufacturing Processes		4	WS251H	Manufacturing Processes	3	Equivalent
21	ME251G	Computer Aided Drafting		3	ME351H	CAD/CAM	3	Equivalent
22	ME205G	Fluid Power		4	ME204H	Fluid Power	4	Equivalent
23	ME206G	Energy Conversion		4	ME206H	Power Engineering	4	Equivalent
24	ME207G	Heat Transfer		4	-	-	-	Not Equivalent
25	ME208G	Renewable Energy Sources		4	ME309H	Renewable Energy Sources	3	Equivalent
26	ME209G	Automation		4	ME308H	Automation in Production	3	Equivalent
27	ME210G	Theory of Machines		4	ME205H	Theory of Machines	3	Equivalent
28	ME211G	Production Technology & Quality Control		3	ME304H	Production Technology	3	Equivalent
29	MT215G	Engineering Materials		4	ME251H	Mechanical Materials and Maintenance	2	Equivalent
30	ME252G	CNC Technology and Robotics		2	ME306H	CNC Technology and Robotics	3	Equivalent
31	ME301G	Machine Design		4	ME305H	Machine Design	3	Equivalent
32	ME308G	Automobile Engineering		4	ME307H	Automobile Engineering	3	Equivalent
33	WS301G	Machining Processes		3	ME303H	Advanced Manufacturing Process	3	Equivalent
34	AE213G	Industrial Management		3	IN301H	Industrial Management	1	Equivalent
35	ME302G	Industrial Fluid Power		4	ME301H	Industrial Fluid Power	3	Equivalent

36	ME303G	Power Plant Engineering	4	ME207H	Power Plant Engineering	4	Equivalent
37	ME304G	Tool Engineering.	4	-	-	-	Not Equivalent
38	ME305G	Refrigeration & Air-Conditioning	4	ME208H	Refrigeration and Air Conditioning	4	Equivalent
39	ME306G	Computer Integrated Manufacturing	4	ME308H	Automation in Production		Equivalent
40	ME307G	Product Development	4	-	-	-	Not Equivalent
41	ES351G	Entrepreneurship and Start up	3	IN353H	Entrepreneurship & Startup	1	Equivalent
42	ME351G	Project	2	ME352H	Capstone Project	2	Equivalent
44	IN351G	Internship	15	IN251H	Basic Internship	4	Equivalent
				IN351H	Internship (Seminar)	6	Equivalent
				IN352H	Internship (Report Writing)	6	Equivalent


(Dr. C.P. Kapse)
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Controller of Examination
Member


(Dr. M.V. Sarode)
HOD, Computer Engineering
Member


(Dr. A.W. Pawde)
HOD, Civil Engineering
Chairman


(Dr. M.B. Daigavane)
Principal,
Government Polytechnic, Nagpur

Program: Electrical Engineering

Annexure-I

Equivalence of Courses 2016 to 2023 Curriculum

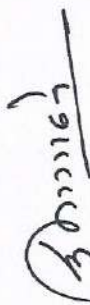
S.N.	Courses in 2016 Curriculum			Courses in NEP Aligned 2023 Curriculum			Remarks
	Course Code	Name of Course	Credits	Course Code	Name of Course	Credits	
1	EN101E	English	4	EN101H	Communication Skills	4	Equivalent
2	EN102E	Communication Skills	4	EN151H	Business Communication	2	Equivalent
3	MN101E	Industrial Management	4	IN301H	Industrial Management	1	Equivalent
4	EV101E	Environmental Science	2	VE251H	Environmental Sustainability	2	Equivalent
5	RD101E	Rural Development	1	-	-	-	No Equivalence
6	CA201E	Computer Application	2	CM151H	Basics of Computer	2	Equivalent
7	PH201E	Engineering Physics	5	PH101H	Applied Physics	4	Equivalent
8	CH202E	Applied Chemistry	5	CH101H	Applied Chemistry	4	Equivalent
9	MH201E	Engineering Mathematics	5	MH101H	Basic Mathematics	4	Equivalent
10	MH203E	Applied Mathematics	5	MH103H	Applied Mathematics	4	Equivalent
11	ME302E	Engineering Graphics	4	ME153H	Engineering Graphics (Electrical)	3	Equivalent
12	WS301E	Workshop Practice	2	WS152H	Workshop Practice (Electrical)	2	Equivalent
13	AM301E	Engineering Mechanics	5	EE151H	Electrical & Electronics Workshop	2	Equivalent
14	EE301E	Basic Electrical Engineering	5	-	-	-	No Equivalence
15	EC305E	Elements of electronics technology	5	EE101H	Fundamentals of Electrical Engineering	3	Equivalent
16	EE302E/ EE414E	Electrical Material & Domestic Appliances/ Electrical & Electronic Workshop	5/2	EC102H	Basic Electronics	3	Equivalent
17	ME304E	Elements of Mechanical Engineering	5	EE252H	Repairs of Electrical Machines & Appliances	3	Equivalent
				-	-	-	No Equivalence

18	EE401E	Electrical Circuit & Network	5	EE202H	Electrical Circuit & Network	3	Equivalent
19	EE402E	Electrical & Electronics Measurement	4	EE203H	Electrical & Electronics Measurement	3	Equivalent
20	EE403E	Instrumentation	4	EE207H	Instrumentation	4	Equivalent
21	EE420E	Industrial Electronics	4	EE301H	Industrial Electronics	3	Equivalent
22	EE404E	Building Electrification	5	EE251H	Electrical Wiring	2	Equivalent
23	EE405E or EE415E	Computer Aided Electrical Drawing or Software's in Electrical Engineering	2/2	EE351H	Electrical Software & CAD	2	Equivalent
24	EE406E	Electrical Machine Fundamentals	5	EE204H	DC Machines & Transformers	3	Equivalent
24	EE407E	Generation Engineering	4	EE201H	Electrical Power Generation	3	Equivalent
25	EE408E	Electrical Installation Systems	5	EE307H	Electrical Estimating & Contracting	3	Equivalent
26	EE409E	Transmission & Distribution	4	EE205H	Electrical Power Transmission & Distribution	3	Equivalent
27	EE410E	Electrical Machine Operation	5	EE206H	AC Machines	5	Equivalent
28	EE411E	Utilization & Traction Systems	4	EE306H	Electrical Utilization & Traction	3	Equivalent
29	EE412E	Switchgear & Protection	5	EE305H	Switchgear & Protection	3	Equivalent
30	EE413E	Electrical Testing and Maintenance	5	EE302H	Testing & Maintenance of Electrical Machines	4	Equivalent
31	EE416E	Industrial Project	2	EE352H	Capstone Project	2	Equivalent
32	SE401E	Seminar	1	-	-	-	No Equivalence
33	ID401E/I D402E	Industrial Training/Industrial Practices	1	IN251H	Basic Internship	4	Equivalent
34	EE501E	Industrial Automation	4	EE309H	PLC & SCADA	3	Equivalent
35	EE502E	Substation Practice	4	-	-	-	No Equivalence
36	EE503E	Renewable Energy Sources	4	EE208H	Renewable Energy Technologies	3	Equivalent
37	EE504E	Illumination Engineering	4	EE304H	Illumination Engineering	3	Equivalent
38	EE505E	Electrical Drives and Control	4	EE309H	PLC & SCADA	3	Equivalent
39	EE506E	Energy Conservation & Audit	4	EE303H	Energy Conservation & Audit	3	Equivalent

40	FS501E	Finishing School	2	VE151H	Integrated Personality Development	2	Equivalent
				VE152H	Advanced Personality Development	2	


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Program: Electrical Engineering

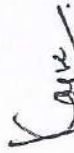
Annexure-II

Equivalence of Courses 2021 to 2023 Curriculum

S.N.	Courses in 2016 Curriculum		Courses in NEP Aligned 2023 Curriculum		Credits	Remarks	
	Course Code	Name of Course	Course Code	Name of Course	Credits		
1	PH101G	Physics	PH101H	Applied Physics	4	4	Equivalent
2	MH101G	Basic Mathematics	MH101H	Basic Mathematics	4	4	Equivalent
3	EN101G	English	EN101H	Communication Skills	3	3	Equivalent
4	AM101G	Engineering Mechanics	-	-	4	-	No Equivalence
5	WS151G	Engineering Workshop Practice	WS152H	Workshop Practice (Electrical)	2	2	Equivalent
			EE151H	Electrical & Electronics Workshop	2	2	
6	LS151G	Life Skills	VE151H	Integrated Personality Development	2	2	Equivalent
			VE152H	Advanced Personality Development	2	2	
7	EV151G	Environmental Science	VE251H	Environmental Sustainability	2	2	Equivalent
8	IC151G	Indian Constitution	VE351H	Indian Constitution	-	1	Equivalent
9	MH103G	Applied Mathematics	MH103H	Applied Mathematics	4	4	Equivalent
10	CH101G	Chemistry	CH101H	Applied Chemistry	4	4	Equivalent
11	EE102G	Fundamentals of Electrical Engineering	EE101H	Fundamentals of Electrical Engineering	5	3	Equivalent
12	EC103G	Fundamentals of Electronics	EC102H	Basic Electronics	4	3	Equivalent
13	ME103G	Elements of Mechanical Engineering	-	-	4	-	No Equivalence
14	EN151G	Business Communication	EN151H	Business Communication	2	2	Equivalent
15	IT151G	Introduction to IT	CM151H	Basics of Computer	2	2	Equivalent
16	ME151G	Engineering Graphics	ME153H	Engineering Graphics (Electrical)	2	3	Equivalent
17	EE201G	Electric Power Generation	EE201H	Electrical Power Generation	3	3	Equivalent
18	EE202G	Electrical Circuit and Network	EE202H	Electrical Circuit & Network	5	3	Equivalent

19	EE203G	Electrical and Electronics Measurements	4	EE203H	Electrical & Electronics Measurement	3	Equivalent
20	EE204G	D.C. Machines and Transformers	5	EE204H	DC Machines & Transformers	3	Equivalent
21	EE205G	Electrical Material and Wiring	4	EE251H	Electrical Wiring	2	Equivalent
22	EE213G	Industrial Electronics	4	EE301H	Industrial Electronics	3	Equivalent
23	EE251G	Electrical Workshop	2	EE252H	Repairs of Electrical Machines & Appliances	3	Equivalent
24	EE206G	Electrical Machines Operation and Control	4	EE206H	AC Machines	5	Equivalent
25	EE207G	Electrical Power Transmission and Distribution	4	EE205H	Electrical Power Transmission & Distribution	3	Equivalent
26	EE208G	Electrical Estimation & Contracting	4	EE307H	Electrical Estimating & Contracting	3	Equivalent
27	EE209G	Instrumentation	4	EE207H	Instrumentation	4	Equivalent
28	EE210G	Renewable Energy Technologies	4	EE208H	Renewable Energy Technologies	3	Equivalent
29	EE211G	Solar Power Generation	4	EE208H	Renewable Energy Technologies	3	Equivalent
30	EE214G	Microcontroller and Applications	4	EE308H	Microcontroller	3	Equivalent
31	EE213G	PLC SCADA	4	EE309H	PLC & SCADA	3	Equivalent
32	AE213G	Industrial Management	3	IN301H	Industrial Management	1	Equivalent
33	EE301G	Testing and Maintenance of Electrical Machines	5	EE302H	Testing & Maintenance of Electrical Machines	4	Equivalent
34	EE302G	Switchgear and Protection	5	EE305H	Switchgear & Protection	3	Equivalent
35	EE303G	Electrical Utilization & Traction	4	EE306H	Electrical Utilization & Traction	3	Equivalent
36	EE304G	Energy Conservation and Audit	4	EE303H	Energy Conservation & Audit	3	Equivalent
37	EE305G	Illumination Engineering	4	EE304H	Illumination Engineering	3	Equivalent
38	EE352G	Project	2	EE352H	Capstone Project	2	Equivalent
39	ES351G	Entrepreneurship and Start up	3	IN353H	Entrepreneurship & Start up	1	Equivalent
40	EE351G	Electrical Software and Computer Aided Drawing	2	EE351H	Electrical Software & CAD	2	Equivalent

41	IN351G	Internship	15	IN251H	Basic Internship	4	Equivalent
				IN351H	Internship (Seminar)	6	
				IN352H	Internship (Report Writing)	6	



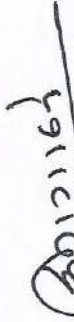
(Dr. C.P. Rapse)

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Member



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I/C, Curriculum Development Cell
Member Secretary



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Member



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HOD, Computer Engineering
Member



(Dr. A.W. Pawde)

HOD, Civil Engineering
Chairman



(Dr. M.B. Daigavane)

Principal,
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Annexure-I

Program: Electronics and Telecommunication Engineering
Equivalence of Courses 2016 to 2023 Curriculum

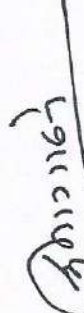
Sr. No.	Courses in 2016 Curriculum			Courses in NEP Aligned 2023 Curriculum			Remark
	Course Code	Course Name	Credits	Course Code	Course Name	Credits	
1	EN101E	English	04	EN101H	Communication Skills	3	Equivalent
2	EN102E	Communication Skills	04	EN151H	Business Communication	2	Equivalent
3	MN101E	Industrial Management	04	IN301H	Industrial Management	1	Equivalent
4	EV101E	Environmental Science	02	VE251H	Environmental Sustainability	2	Equivalent
5	RD101E	Rural Development	01	--	--	--	No Equivalent
6	CA201E	Computer Application	02	CM151H	Basics of Computer	2	Equivalent
7	PH201E	Engineering Physics	05	PH101H	Applied Physics	4	Equivalent
8	CH202E	Applied Chemistry	05	CH101H	Applied Chemistry	4	Equivalent
9	MH201E	Engineering Mathematics	05	MH101H	Basic Mathematics	4	Equivalent
10	MH203E	Applied Mathematics	05	MH103H	Applied Mathematics	4	Equivalent
11	ME302E	Engineering Graphics	04	ME154H	Engineering Graphics (Electronics)	3	Equivalent
12	WS301E	Workshop Practice	02	WS153H	Workshop Practice (Electronics)	2	Equivalent
13	AM301E	Engineering Mechanics	05	--	--	--	No Equivalent
14	EE303E	Electrical Engineering	05	EE102H	Basics Electrical Engineering	3	Equivalent
15	EC 301E	Basic Electronics	05	EC101H	Basic Electronics	3	Equivalent
16	EC 302E	Electronics Material and Component	04	EC151H	Electronic Workshop	2	Equivalent
17	ME305E	Mechanical Technology	04	--	--	--	No Equivalent
18	EC401E	Electronic Devices & Circuits	05	EC201H	Electronic Devices and circuits	3	Equivalent

19	EC402E	Principles of Digital Electronics	05	EC202H	Principles of Digital Electronics	3	Equivalent
20	EC403E	Basics Of Communication	04	EC203H	Basics of Communication	3	Equivalent
21	EC404E	Circuit Analysis And Simulation	05	EC207H	Circuit Analysis	4	Equivalent
22	EC405E	Microcontroller	05	EC302H	Microcontroller	4	Equivalent
23	EC406E	Linear Integrated Circuits	05	EC206H	Linear Integrated Circuit	4	Equivalent
24	EC407E	Electronic Instrumentation	04	EC204H	Instrumentation	3	Equivalent
25	EC408E	Communication Systems	05	EC205H	Communication Systems	4	Equivalent
26	EC409E	Wireless communication	05	EC305H	Mobile Communication	3	Equivalent
27	EC410E	Digital Communication	05	EC301H	Digital Communication	3	Equivalent
28	EC411E	Audio Video System	05	EC307H	Audio Video Systems	3	Equivalent
29	EC412E	Power Electronic	04	EC310H	Power Electronics	3	Equivalent
30	EC413E	Elements of Mechatronics	03	--	--	--	No Equivalent
31	EC414E	Maintenance Of Electronics Equipments	02	EC351H	Testing & Maintenance of Electronic Systems	4	Equivalent
32	EC415E	PCB Technology	02	EC252H	PCB Design & Simulation	2	Equivalent
33	EC416E	Electronic Workshop	02	EC252H	PCB Design & Simulation	2	Equivalent
34	EC417E	Industrial Project	02	EC352H	Capstone Project	2	Equivalent
35	SE401E	Seminar	01	--	--	--	No Equivalent
36	ID401E/ ID402E	Industrial Training / Industrial Practices	01	IN251H	Basic Internship	4	Equivalent
37	EC501E	Embedded System	05	EC306H	Embedded Systems	3	Equivalent
38	EC502E	VHDL Programming	05	EC303H	VLSI and VHDL programming	3	Equivalent
39	EC503E	Control System	05	EC308H	Control System	3	Equivalent
40	EC504E	Process Instrumentation	05	EC309H	Industrial Automation	3	Equivalent
41	EC505E	Optical Communication	05	EC208H	Optical Communication	4	Equivalent
42	EC506E	Computer Communication Network	05	EC209H	Computer communication Network	4	Equivalent

43	FS501E	Finishing School	02	VE151H	Integrated Personality Development	2	Equivalent
				VE152H	Advanced Personality Development	2	Equivalent


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(Dr. A. W. Pawde)
HOD, Civil Engineering
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Principal,
Government Polytechnic, Nagpur

Program: Electronics and Telecommunication Engineering
Equivalence of Courses 2021 to 2023 Curriculum

Annexure-II

Sr. No.	Courses in 2021 Curriculum			Courses in NEP Aligned 2023 Curriculum			Remark
	Course Code	Course Name	Credits	Course Code	Course Name	Credits	
1	PH101G	Physics	4	PH101H	Applied Physics	4	Equivalent
2	MH101G	Basic Mathematics	4	MH101H	Basic Mathematics	4	Equivalent
3	EN101G	English	3	EN101H	Communication Skills	3	Equivalent
4	WS151G	Engineering Workshop Practice	2	WS153H	Workshop Practice (Electronics)	2	Equivalent
5	ME151G	Engineering Graphics	2	ME154H	Engineering Graphics (Electronics)	3	Equivalent
6	IT151G	Introduction to IT Systems	2	CM151H	Basics of Computer	2	Equivalent
7	LS151G	Life Skills	1	VE151H	Integrated Personality Development	2	Equivalent
				VE152H	Advanced Personality Development	2	Equivalent
8	IC151G	Indian Constitution	Nil	VE351H	Indian Constitution	1	Equivalent
9	CH101G	Chemistry	4	CH101H	Applied Chemistry	4	Equivalent
10	MH103G	Applied Mathematics	4	MH103H	Applied Mathematics	4	Equivalent
11	AM101G	Engineering Mechanics	4	---	---	---	No Equivalent
12	EC101G	Basic Electronics	5	EC101H	Basic Electronics	3	Equivalent
13	EC102G	Electronic Material and Components	4	EC151H	Electronic Workshop	2	Equivalent
14	EE101G	Basics of Electrical Engineering	4	EE102H	Basics Electrical Engineering	3	Equivalent
15	EN151G	Business Communication	2	EN151H	Business Communication	2	Equivalent
16	EV151G	Environmental Science	Nil	VE251H	Environmental Sustainability	2	Equivalent
17	EC201G	Electronic Devices and Circuits	5	EC201H	Electronic Devices and circuits	3	Equivalent

18	EC202G	Electronic Instrumentation	4	EC204H	Instrumentation	3	Equivalent
19	EC203G	Principles of Digital Electronics	4	EC202H	Principles of Digital Electronics	3	Equivalent
20	EC204G	Basics of Communication	4	EC203H	Basics of Communication	3	Equivalent
21	EC205G	Circuit Analysis and Simulation	5	EC207H	Circuit Analysis	4	Equivalent
22	AE213G	Industrial Management	3	IN301H	Industrial Management	1	Equivalent
23	IT253G	Programming in C	3	EC251H	C programming	2	Equivalent
24	EC206G	Linear Integrated Circuits	5	EC206H	Linear Integrated Circuit	4	Equivalent
25	EC207G	Communication Systems	5	EC205H	Communication Systems	4	Equivalent
26	EC208G	Microcontroller	5	EC302H	Microcontroller	4	Equivalent
27	EC209G	VLSI and VHDL Programming	4	EC303H	VLSI and VHDL programming	3	Equivalent
28	EC210G	Python Programming	4	EC304H	Python Programming	3	Equivalent
29	EC211G	Optical Communication	4	EC208H	Optical Communication	4	Equivalent
30	EC212G	Computer Communication Network	4	EC209H	Computer communication Network	4	Equivalent
31	EC251G	Electronic Workshop	2	EC351H	Testing & Maintenance of Electronic Systems	4	Equivalent
32	EC301G	Digital Communication	5	EC301H	Digital Communication	3	Equivalent
33	EC302G	Wireless Communication	4	EC305H	Mobile Communication	3	Equivalent
34	EC303G	Embedded Systems	4	EC306H	Embedded Systems	3	Equivalent
35	EC304G	Consumer Electronics	5	EC307H	Audio Video Systems	3	Equivalent
36	EC305G	Power Electronics	4	EC310H	Power Electronics	3	Equivalent
37	EC306G	Control Systems	4	EC308H	Control System	3	Equivalent
38	EC307G	Industrial Automation	4	EC309H	Industrial Automation	3	Equivalent
39	EC351G	Project	2	EC352H	Capstone Project	2	Equivalent
40	EC352G	E-Sim (Online Course)	2	EC252H	PCB Design & Simulation	2	Equivalent
41	ES351G	Entrepreneurship and start up	3	IN353H	Entrepreneurship & Startup	1	Equivalent

42	IN351G	Internship	15	IN251H IN351H IN352H	Basic Internship Internship (Seminar) Internship (Report Writing)	4 6 6	Equivalent
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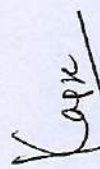
Program: Information Technology

Annexure-I

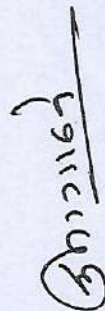
Equivalence of Courses 2016 to 2023 Curriculum

Sr. No.	Courses in 2016 Curriculum			Courses in NEP Aligned 2023 Curriculum		
	Course code	Name of course	Credits	Course code	Name of course	Credits
1	EN101E	English	4	EN101H	Communication Skills	3
2	EN102E	Communication Skills	4	EN151H	Business communication	2
3	MN101E	Industrial Management	4	IN301H	Industrial Management	1
4	EV101E	Environmental Science	2	VE251H	Environmental Sustainability	2
5	RD101E	Rural Development	1	-	-	-
6	CM201E	Computer Fundamentals	2	CM151H	Basics of Computer	2
7	PH201E	Engineering Physics	5	PH101H	Applied physics	4
8	CH202E	Applied Chemistry	5	CH101H	Applied Chemistry	4
9	MH201E	Engineering Mathematics	5	MH101H	Basic Mathematics	4
10	MH203E	Applied Mathematics	5	MH102H	Applied Mathematics	4
11	ME302E	Engineering Graphics	4	-	-	-
12	CM301E	Computer Workshop	2	CM152H	Computer Workshop	2
13	AM301E	Engineering Mechanics	5	-	-	-
14	EE303E	Electrical Engineering	5	-	-	-
15	EC308E	Principles of Electronics	5	EC109H	Basics of Electronics	3
16	CM302E	Computer Network	5	IT203H	Computer Network	3
17	EC310E	Digital Technique	4	EC210H	Principles of Digital Technique and Microprocessor	3
18	CM407E	Microprocessor	4	-	-	-
19	IT401E	Data communication	3	-	-	No equivalence
20	IT402E	Java Programming	5	IT302H	Java Programming	4
21	IT403E	Linux Programming	5	IT305H	Linux Programming	3
22	IT404E	Management Information system	3	-	-	No equivalence
23	IT405E	Network Administration & Security	5	IT207H	Cyber Security and Privacy	4
24	IT406E	Software Engineering	5	IT303H	Software Engineering	3
25	CM414E	Software Project Management	2	-	-	No equivalence
26	IT407E	Internetworking with TCP/IP	3	-	-	No equivalence
27	CM401E	Programming in C	5	IT101H	Basics of Programming	4
28	CM402E	Object Oriented Programming	5	IT202H	Object Oriented Programming	3
29	CM403E	Data Structure	5	IT204H	Data Structure	4
30	CM404E	Operating System	4	IT301H	Operating System	3

31	CM406E	Relational Database Management System	5	CM204H	Database Management System	4	Equivalent
32	CM412E	Computer Hardware & Maintenance	2	IT252H	Computer Hardware Maintenance	3	Equivalent
33	CM413E	Web Page Design	2	IT151H	Web Development	2	Equivalent
34	IT408E	Industrial Project	2	IT352H	Capstone Project	2	Equivalent
35	SE401E	Seminar	1	-	-	-	No equivalence
36	ID401E/ ID402E	Industrial Training Industrial Practices/	1	IN251H	Basic Internship	4	Equivalent
37	IT501E	Advance Java	4	IT304H	Advance Java	3	Equivalent
38	IT502E	Web Technologies	4	-	-	-	No equivalence
39	IT503E	Multimedia Techniques	4	-	-	-	No equivalence
40	IT504E	Data Mining & Data Warehousing	4	IT306H	Data Warehousing and Mining	3	Equivalent
41	IT505E	Mobile Computing	4	-	-	-	No equivalence
42	CM502E	Software Testing	4	-	-	-	No equivalence
43	FS501E	Finishing School	2	VE151H	Integrated personality development	2	Equivalent
				VE152H	Advanced personality development	2	


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HOD, Computer Engineering
Member


(Dr. A. W. Pawde)
HOD, Civil Engineering
Chairman


(Dr. M. B. Daigavane)
Principal,
Government Polytechnic, Nagpur

Program: Information Technology

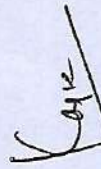
Annexure-II

Equivalence of Courses 2021 to 2023 Curriculum

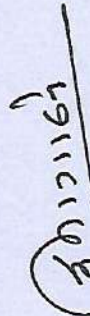
Sr. No.	Courses in 2021 Curriculum			Courses in NEP Aligned 2023 Curriculum			Remark
	Course code	Name of course	Credits	Course code	Name of course	Credits	
1	MH101G	Basic Mathematics	4	MH101H	Basic Mathematics	4	Equivalent
2	CH101G	Chemistry	4	CH101H	Applied Chemistry	4	Equivalent
3	EC104G	Principles of Electronics	4	EC109H	Basics of Electronics	3	Equivalent
4	EN101G	English	3	EN101H	Communication Skills	3	Equivalent
5	CM151G	Computer Workshop	2	CM152H	Computer Workshop	2	Equivalent
6	IT151G	Introduction to IT Systems	2	CM151H	Basics of Computer	2	Equivalent
7	ME151G	Engineering Graphics	2	-	-	-	No equivalence
8	IC151G	Indian Constitution	-	VE351H	Indian Constitution	1	Equivalent
9	MH102G	Applied Mathematics	4	MH102H	Applied Mathematics	4	Equivalent
10	PH101G	Physics	4	PH101H	Applied physics	4	Equivalent
11	EE101G	Basics of Electrical Engineering	4	-	-	-	No equivalence
12	IT101G	Basics of Programming	5	IT101H	Basics of Programming	4	Equivalent
13	EN151G	Business communication	2	EN151H	Business communication	2	Equivalent
14	LS151G	Life Skills	1	VE151	Integrated personality development	2	Equivalent
				VE152H	Advanced personality development	2	
15	EV151G	Environmental Science	-	VE251H	Environmental Sustainability	2	Equivalent
16	IT251G	Web Page Design	2	IT151H	Web Development	2	Equivalent
17	IT201G	MIS	3	-	-	-	No equivalence
18	IT202G	Computer Network	4	IT203H	Computer Network	3	Equivalent
19	CM202G	Data Structure	5	IT204H	Data Structure	4	Equivalent
20	IT203G	Object Oriented	4	IT202H	Object Oriented Programming	3	Equivalent

		Programming										
21	IT204G	Data communication	3			-	-	-	-	No equivalence		
22	CM204G	Database Management System	4		CM204H		Database Management System	4	4	Equivalent		
23	IT252G	GUI Programming	2		IT251H		GUI Programming	2	2	Equivalent		
24	IT205G	Internetworking with TCP/IP	3		-		-			No equivalence		
25	IT206G	Software Engineering	4		IT303H		Software Engineering	3	3	Equivalent		
26	EC216G	DTE and Microprocessor	4		EC210H		Principles of Digital Technique and Microprocessor	3	3	Equivalent		
27	IT207G	Java Programming	4		IT302H IT304H		Java Programming Advance Java	4 3	4 3	Equivalent		
28	AE213G	Industrial Management	3		IN301H		Industrial Management	1	1	Equivalent		
29	IT208G	Data Warehouse and Data Mining	4		IT306H		Data Warehousing and Mining	3	3	Equivalent		
30	IT209G	AI and Its application	4		IT201H		Introduction to AI	2	2	Equivalent		
31	IT210G	Web Programming with Python	4		IT206H		Web Programming	4	4	Equivalent		
32	AI203G	Introduction to Machine Learning	4		-		-	-	-	No equivalence		
33	IT301G	Operating System	4		IT301H		Operating System	3	3	Equivalent		
34	IT302G	Linux Operating System	4		IT305H		Linux Programming	3	3	Equivalent		
35	IT303G	Multimedia Techniques	4		-		-	-	-	No equivalence		
36	IT304G	Network Security	4		IT207H		Cyber Security and Privacy	4	4	Equivalent		
37	ES351G	Entrepreneurship and Start up	3		IN353H		Entrepreneurship & Startup	1	1	Equivalent		
38	IT305G	Software Testing	4		-		-	-	-	No equivalence		
39	IT306G	Mobile Computing	4		-		-	-	-	No equivalence		
40	IT351G	Project	2		IT352H		Capstone Project	2	2	Equivalent		

41	IN351G	Internship	15	IN251H IN351H IN352H	Basic Internship Seminar Report Writing	4 6 6	Equivalent
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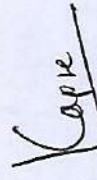
Program: Computer Engineering

Equivalence of Courses 2016 to 2023 Curriculum

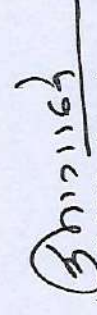
Annexure-I

Sr. No.	Courses in 2016 Curriculum			Courses in NEP Aligned 2023 Curriculum			Remark
	Course code	Name of course	Credits	Course code	Name of course	Credits	
1	EN101E	English	4	EN101H	Communication skills	4	Equivalent
2	EN102E	Communication skills	4	EN151H	Business Communication	2	Equivalent
3	MN101E	Industrial Org. & Management	4	IN301H	Industrial Management	1	Equivalent
4	EV101E	Environmental Science	2	VE251H	Environmental Sustainability	2	Equivalent
5	RD101E	Rural development	1	-	-	-	No Equivalent
6	CM201E	Computer Fundamentals	2	CM151H	Basics of Computer	2	Equivalent
7	PH201E	Engineering Physics	5	PH101H	Applied Physics	4	Equivalent
8	CH202E	Applied Chemistry	5	CH101H	Applied Chemistry	4	Equivalent
9	MH201E	Engineering Mathematics	5	MH101H	Basic Mathematics	4	Equivalent
10	MH203E	Applied Mathematics	5	MH102H	Applied Mathematics	4	Equivalent
11	ME302E	Engineering Graphics	4	-	-	-	No Equivalent
12	CM301E	Computer Workshop	2	CM152H	Computer Workshop	2	Equivalent
13	AM301E	Engineering Mechanics	5	-	-	-	No Equivalent
14	EE303E	Electrical Engineering	5	-	-	-	No Equivalent
15	EC308E	Principle of Electronics	5	EC109H	Basics of Electronics	3	Equivalent
16	CM302E	Computer Network	5	CM202H	Computer Communication and Network	3	Equivalent
	CM405E	Computer Communication	3	-	-	-	-
17	EC310E	Digital Technique	4	EC210H	Principles of Digital Technique and Microprocessors	3	Equivalent
	CM407E	Microprocessor	4	-	-	-	-
18	CM401E	Programming in 'C'	5	IT101H	Basics of programming	2	Equivalent
19	CM402E	Object Oriented Programming	5	IT202H	Object Oriented Programming	3	Equivalent
20	CM403E	Data Structure	5	CM201H	Data Structures	3	Equivalent
21	CM404E	Operating System	4	CM301H	Operating System	3	Equivalent
22	CM406E	Relational Database Management System	5	CM204H	Database Management System	4	Equivalent
23	CM408E	Computer Security	3	CM307H	Information & Cyber Security	3	Equivalent
24	CM409E	Linux Administration	5	-	-	-	No Equivalent
25	CM410E	E-Commerce	3	-	-	-	No Equivalent
26	CM411E	System Analysis & Design	5	-	-	-	No Equivalent
27	CM412E	Computer Hardware & Maintenance	2	-	-	-	No Equivalent

28	IT402E	Java Programming	5	CM205H	Java Programming	4	Equivalent
29	IT406E	Software Engineering	5	CM203H	Software Engineering	3	Equivalent
	CM414E	Software Project Management	2				
30	CM413E	Web Page Design	2	CM153H	Web Development	2	Equivalent
31	CM415E	Industrial Project	2	CM352H	Capstone Project	2	Equivalent
32	SE401E	Seminar	1	-	-	-	No Equivalent
33	ID401E/ ID402E	Industrial Training / Industrial Practices	1	IN251H	Basic Internship	4	Equivalent
34	CM501E	Network Management & Administration	4	-	-		No Equivalent
35	CM502E	Software Testing	4	CM305H	Software Testing	3	Equivalent
36	CM503E	Database Administration	4	-	-		No Equivalent
37	CM504E	Computer Graphics	4	-	-		No Equivalent
38	CM505E	Web Programming	4	CM351H	Web Programming using PHP	2	Equivalent
39	IT501E	Advance Java	4	CM302H	Advance Java	4	Equivalent
40	FS501E	Finishing School	2	VE151H	Integrated Personality Development	2	Equivalent
				VE152H	Advanced Personality Development	2	


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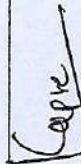
Program: Computer Engineering

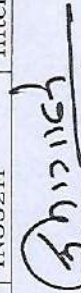
Annexure-II

Equivalence of Courses 2021 to 2023 Curriculum

Sr. No.	Courses in 2021 Curriculum			Courses in NEP Aligned 2023 Curriculum			Remark
	Course code	Name of course	Credits	Course code	Name of course	Credits	
1	PH101G	Physics	4	PH101H	Applied Physics	4	Equivalent
2	MH101G	Basic Mathematics	4	MH101H	Basic Mathematics	4	Equivalent
3	EN101G	English	3	EN101H	Communication Skills	3	Equivalent
4	EE101G	Basics of Electrical Engineering	4	-	-	-	Not Equivalent
5	CM151G	Computer Workshop	2	CM152H	Computer Workshop	2	Equivalent
6	ME151G	Engineering Graphics	2		Not Equivalent		
7	LS151G	Life Skills	1	VE151H	Integrated Personality Development	2	Equivalent
				VE152H	Advanced Personality Development	2	
8	IC151G	Indian Constitution	-	VE351H	Indian Constitution	1	Equivalent
9	MH102G	Applied Mathematics	4	MH102H	Applied Mathematics	4	Equivalent
10	CH101G	Chemistry	4	CH101H	Applied Chemistry	4	Equivalent
11	EC104G	Principles of Electronics	4	EC109H	Basics of Electronics	3	Equivalent
12	IT101G	Basics of Programming	5	IT101H	Basics of programming	4	Equivalent
13	IT151G	Introduction to IT Systems	2	CM151H	Basics of Computer	2	Equivalent
14	EN151G	Business Communication	2	EN151H	Business Communication	2	Equivalent
15	EV151G	Environmental Science	-	VE251H	Environmental Sustainability	2	Equivalent
16	CM201G	Discrete Structures and Graph Theory	3	-	-	-	Not Equivalent
17	CM202G	Data Structures	5	CM201H	Data Structures	3	Equivalent
18	CM203G	Python Programming	4	CM252H	Python Programming	3	Equivalent
19	CM204G	Database Management System	4	CM204H	Database Management System	4	Equivalent
20	CM205G	Computer Communication and Network	4	CM202H	Computer Communication and Network	3	Equivalent
21	CM208G	Microprocessor	4	EC210H	Principles of Digital Technique and Microprocessors	3	Equivalent
22	EC215G	Digital Techniques	4	-	-	-	-
23	IT251G	Web Page Design	2	CM153H	Web Development	4	Equivalent
24	CM206G	Information & Cyber Security	3	CM307H	Information & Cyber Security	3	Equivalent

25	CM207G	Java Programming	4	CM205H	Java Programming	4	Equivalent
26	IT206G	Software Engineering	4	CM203H	Software Engineering	3	Equivalent
27	CM209G	Advanced Computer Network	4	CM206H	Advanced Computer Network	4	Equivalent
28	CM210G	Data Warehouse and Mining	4	CM207H	Data Warehouse and Mining	4	Equivalent
29	CM211G	Digital Marketing	4	-	-	-	Not Equivalent
30	CM251G	Web Programming using PHP	2	CM351H	Web Programming using PHP	2	Equivalent
31	AE213G	Industrial Management	3	IN301H	Industrial Management	1	Equivalent
32	CM301G	Operating System	4	CM301H	Operating System	3	Equivalent
33	CM302G	Advance Java	4	CM302H	Advance Java	4	Equivalent
34	IT305G	Software Testing	4	CM305H	Software Testing	3	Equivalent
35	CM303G	Machine Learning	4	CM303H	Machine Learning	3	Equivalent
36	CM304G	Internet Of Things	4	CM308H	Internet of Things	3	Equivalent
37	CM305G	Mobile Application Development	4	CM306H	Mobile Application Development	3	Equivalent
38	CM306G	Cloud Computing	4	CM309H	Cloud Computing	3	Equivalent
39	ES351G	Entrepreneurship and Start up	3	IN353H	Entrepreneurship & Startup	1	Equivalent
40	CM351G	Project	2	CM352H	Capstone Project	2	Equivalent
41	IN351G	Internship	15	IN251H	Basic Internship	4	Equivalent
				IN351H	Internship (Seminar)	6	Equivalent
				IN352H	Internship (Report Writings)	6	Equivalent

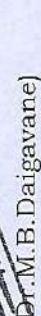

(Dr. C.P. Kapase)
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Member


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Member Secretary


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HOD, Civil Engineering
Chairman


(Dr. M.B. Daigavane)
Principal,
Government Polytechnic, Nagpur

Program: Packaging Technology

Annexure-I

Equivalence of Courses 2016 to 2023 Curriculum

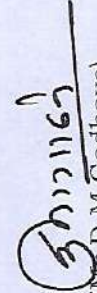
S. No.	Courses in 2016 Curriculum			Courses in NEP Aligned 2023 Curriculum			Remark
	Course Code	Course Name	Credits	Course Code	Course Name	Credits	
1	EN101E	English	4	EN101H	Communication Skills	3	Equivalent
2	EN102E	Communication Skills	4	EN151H	Business Communication	2	Equivalent
3	MN101E	Industrial Organisation & Management	4	IN301H	Industrial Management	1	Equivalent
4	EV101E	Environmental Science	2	VE251H	Environmental Sustainability	2	Equivalent
5	RD101E	Rural Development	1	-	-	-	No Equivalence
6	CA201E	Computer Application	2	CM151H	Basics of Computers	2	Equivalent
7	PH201E	Engineering Physics	5	PH101H	Applied Physics	4	Equivalent
8	CH201E	Applied Chemistry	5	CH101H	Applied Chemistry	4	Equivalent
9	MH201E	Engineering Mathematics	5	MH101H	Basic Mathematics	4	Equivalent
10	MH202E	Applied Mathematics	5	MH102H	Applied Mathematics	4	Equivalent
11	ME301E	Engineering Graphics	4	ME151H	Engineering Graphics	3	Equivalent
12	WS301E	Workshop Practice	2	WS151H	Workshop Practice	2	Equivalent
13	AM301E	Engineering Mechanics	5	AM101H	Engineering Mechanics	3	Equivalent
14	EE304E	Elements of Electrical Technology	5	EE103H	Basic Electricals and Electronics	3	Equivalent
15	EC307E	Fundamentals of Electronics	5				
16	PK301E	Paper & Board in Packaging	5	PK204H	Packaging Papers & Products	3	Equivalent
				PK206H	Folding Cartons & Corrugated Boxes	5	

17	PK302E	Traditional Packaging Materials	5	PK202H	Traditional Packaging Materials	3	Equivalent
18	AM407E	Strength of Materials	5	-	-	-	No Equivalence
19	ME401E	Engineering Drawing	4	ME157H	Engineering Drawing	2	Equivalent
20	ME402E	Machine Drawing	5	-	-	-	No Equivalence
21	ME403E	Theory of Machines	4	-	-	-	No Equivalence
22	PK401E	Fundamentals of Packaging	5	PK201H	Fundamentals of Packaging	3	Equivalent
23	PK402E	Production Processes	4	-	-	-	No Equivalent
24	PK403E	Plastic Materials in Packaging	5	PK203H	Plastic Materials in Packaging	3	Equivalent
25	PK404E	Packaging of Pharmaceuticals	5	PK305H	Packaging of Pharmaceuticals	3	Equivalent
26	PK405E	Package Printing & Aesthetics	5	PK205H	Packaging Printing: Offset, Screen, and Digital Technology	3	Equivalent
				PK302H	Packaging Printing: Gravure and Flexography	4	
27	PK406E	Plastic Package Manufacturing	5	PK207H	Plastic Package Manufacturing	4	Equivalent
28	PK407E	Package Design Engineering	5	PK306H	Package Design Engineering	3	Equivalent
29	PK408E	Logistics & Supply Chain Management	4	PK307H	Logistics & Supply Chain Management	3	Equivalent
30	PK409E	Package Making	2	PK351H	Packaging Development	2	Equivalent
31	PK410E	Packaging Economics & Value Engg.	3				
32	PK411E	Packaging Processes	2	PK251H	Packaging Processes	2	Equivalent
33	PK412E	Case Study	2	-	-	-	No Equivalent
34	PK413E	Industrial Project	2	PK352H	Capstone Project	2	Equivalent
35	SE401E	Seminar	1	-	-	-	No Equivalent
36	ID401E / ID402E	Industrial Training / Industrial Practices	1	IN251H	Basic Internship	4	Equivalent
37	PK501E	Packaging Of Food & Beverages	4	PK301H	Packaging of Food & Beverages	3	Equivalent
38	PK502E	Refrigeration in Packaging	4	PK309H	Refrigeration in Packaging	3	Equivalent

38	PK503E	Packaging Of Chemicals	4	PK304H	Packaging of Chemicals, Garments & Handicrafts	3	Equivalent
39	PK504E	Packaging Of Engineering Good	4	PK303H	Packaging of Engineering Goods	3	Equivalent
40	PK505E	Production Management & Q.A.	5	PK208H	Production Management and Quality Assurance	3	Equivalent
41	PK506E	Maintenance in Packaging	5	PK209H	Maintenance in Packaging	3	Equivalent
42	FS501E	Finishing School	2	VE151H	Integrated Personality Development	2	Equivalent
				VE152H	Advanced Personality Development	2	


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Program: Packaging Technology

Annexure-II

Equivalence of Courses 2021 to 2023 Curriculum

S. No.	Courses in 2021 Curriculum			Courses in NEP Aligned 2023 Curriculum			Remarks
	Course Code	Course Name	Credits	Course Code	Course Name	Credits	
1	AM101G	Engineering Mechanics	4	AM101H	Engineering Mechanics	3	Equivalent
2	IT151G	Introduction to IT Systems	2	CM151H	Basics of Computers	2	Equivalent
3	CH101G	Chemistry	4	CH101H	Applied Chemistry	4	Equivalent
4	EN101G	English	3	EN101H	Communication Skills	3	Equivalent
5	EN151G	Business Communication	2	EN151H	Business Communication	2	Equivalent
6	EV151G	Environmental Science	-	VE251H	Environmental Sustainability	2	Equivalent
7	LS151G	Life Skills	1	VE151H	Integrated Personality Development	2	Equivalent
				VE152H	Advanced Personality Development	2	
8	ME101G	Engineering Graphics	3	ME151H	Engineering Graphics	3	Equivalent
9	ME203G	Engineering Drawing	4	ME157H	Engineering Drawing	2	Equivalent
10	ME210G	Theory of Machines	4	-	-	-	No Equivalent
11	MH101G	Basic Mathematics	4	MH101H	Basic Mathematics	4	Equivalent
12	MH102G	Applied Mathematics	4	MH102H	Applied Mathematics	4	Equivalent
13	AE213G	Industrial Management	3	IN301H	Industrial Management	1	Equivalent
14	PH101G	Physics	4	PH101H	Applied Physics	4	Equivalent
15	PK201G	Packaging Materials - II	6	PK204H	Packaging Papers & Products	3	Equivalent
16	PK102G	Packaging Materials - I	5	PK202H	Traditional Packaging Materials	3	Equivalent
17	PK101G	Fundamentals of Packaging	5	PK201H	Fundamentals of Packaging	3	Equivalent
18	PK202G	Plastic Materials in Packaging	5	PK203H	Plastic Materials in Packaging	3	Equivalent
19	PK204G	Packaging of Pharmaceuticals	5	PK305H	Packaging of Pharmaceuticals	3	Equivalent

20	PK302G	Package Printing and Aesthetics	5	PK205H PK302H	Packaging Printing: Offset, Screen, and Digital Technology Packaging Printing: Gravure and Flexography	3 4	Equivalent
21	PK203G	Plastic Package Manufacturing\$	5	PK207H	Plastic Package Manufacturing	4	Equivalent
22	PK301G	Package Design Engineering\$	6	PK306H	Package Design Engineering	3	Equivalent
23	PK303G	Logistics & Supply Chain Management\$	4	PK307H	Logistics & Supply Chain Management	3	Equivalent
24	PK251G	Packaging Processes\$	2	PK251H	Packaging Processes	2	Equivalent
25	PK351G	Project	2	PK352H	Capstone Project	2	Equivalent
26	PK304G	Packaging Of Food And Beverages	4	PK301H	Packaging of Food & Beverages	3	Equivalent
27	PK305G	Refrigeration in Packaging	4	PK309H	Refrigeration in Packaging	3	Equivalent
28	PK207G	Packaging Of Chemicals, Garments & Handicrafts	4	PK304H	Packaging of Chemicals, Garments & Handicrafts	3	Equivalent
29	PK206G	Packaging Of Engineering Goods	4	PK303H	Packaging of Engineering Goods	3	Equivalent
30	PK208G	Production Management & Q.A.	4	PK208H	Production Management and Quality Assurance	3	Equivalent
31	PK209G	Maintenance in Packaging	4	PK209H	Maintenance in Packaging	3	Equivalent
32	WS151G	Engineering Workshop Practice	2	WS151H	Workshop Practice	2	Equivalent
33	IC151G	Indian Constitution	-	VE351H	Indian Constitution	1	Equivalent
34	ES351G	Entrepreneurship and Start up	3	IN353H	Entrepreneurship & Startup	1	Equivalent
35	PK252G	Introduction to Packaging & Labeling Design Softwares	2	PK252H	Packaging Label Design Software	?	Equivalent

36	IN351G	Internship	15	IN251H	Basic Internship	4	Equivalent
				IN351H	Internship (Seminar)	6	Equivalent
				IN352H	Internship (Report Writing)	6	Equivalent
37	EX101G	Fundamentals of Electrical and Electronics Engineering	5	EE103H	Basic Electricals and Electronics	3	Equivalent
38	PK205G	Packaging Development	3	PK351H	Packaging Development	2	Equivalent

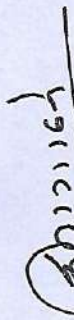


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Program: Metallurgical Engineering

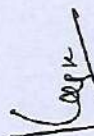
Annexure-I

Equivalence of Courses 2016 to 2023 Curriculum

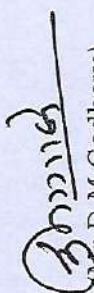
Sr. No.	Courses in 2016 Curriculum			Courses in NEP Aligned 2023 Curriculum			Remark
	Course code	Course Name	Credits	Course code	Course Name	Credits	
1	EN101E	English	4	EN101H	Communication Skills	3	Equivalent
2	EN102E	Communication Skills	4	EN151H	Business Communication	2	Equivalent
3	MN101E	Industrial Management	4	IN353H	Industrial Management	1	Equivalent
4	EV101E	Environmental Science	2	VE251H	Environmental Sustainability	2	Equivalent
5	RD101E	Rural Development	1	-	-	-	No Equivalence
6	CA201E	Computer Applications	2	CM151H	Basics of computer	2	Equivalent
7	PH201E	Engineering Physics	5	PH101H	Applied Physics	4	Equivalent
8	CH201E	Applied Chemistry	5	CH101H	Applied Chemistry	4	Equivalent
9	MH201E	Engineering Mathematics	5	MH101H	Basic Mathematics	4	Equivalent
10	MH202E	Applied Mathematics	5	MH102H	Applied Mathematics	4	Equivalent
11	ME302E	Engineering Graphics	4	ME155H	Engineering Graphics	2	Equivalent
12	WS301E	Workshop Practice	2	WS151H	Engineering Workshop Practice	2	Equivalent
13	AM301E	Engineering Mechanics	5	AM101H	Engineering Mechanics	3	Equivalent
14	EE306E	Electrical Technology	5	-	-	-	No Equivalence
15	EC304E	Applied Electronics & Mechatronics	5	-	-	-	No Equivalence
16	MT301E	Basic Metallurgy	5	MT101H	Basic Metallurgy	3	Equivalent
17	MT302E	Metallurgical Thermodynamics	4	MT201H	Metallurgical Thermodynamics	3	Equivalent
18	MT401E	Testing Of Materials	6	MT205H	Testing of Materials	4	Equivalent
19	MT402E	Mechanical Metallurgy	6	MT302H	Mechanical Metallurgy	3	Equivalent
20	MT403E	Iron Making	3	MT202H	Iron Making	3	Equivalent

21	MT404E	Steel Making	4	MT206H	Steel Making	3	Equivalent
22	MT405E	Non ferrous Metallurgy	3	MT305H	Non Ferrous Metallurgy	3	Equivalent
23	MT406E	Physical Metallurgy	6	MT207H	Physical Metallurgy	5	Equivalent
24	MT407E	Heat Treatment	6	MT301H	Heat Treatment	4	Equivalent
25	MT408E	Metallurgical Analysis	5	MT252H	Metallurgical Analysis	3	Equivalent
26	MT409E	Foundry Technology	5	MT102H	Foundry Technology	3	Equivalent
27	MT410E	Special Casting Techniques	5	MT306H	Modern foundry Technology	3	Equivalent
28	MT411E	Powder Metallurgy	4	MT203H	Powder Metallurgy	3	Equivalent
29	MT412E	Mineral Dressing	4	MT204H	Mineral Dressing	3	Equivalent
30	MT413E	Metallurgical Quality control	3	----	-----	-----	No Equivalence
31	MT414E	Metallurgical Workshop	2	----	-----	-----	No Equivalence
32	ME415E	Computer Aided Drawing	2	----	-----	-----	No Equivalence
33	MT415E	Metallurgical Design & Drawing	2	MT351H	Metallurgical Design & Drawing	2	Equivalent
34	MT416E	Industrial Project	2	MT352H	Capstone project	2	Equivalent
35	SE401E	Seminar	1	----	-----	-----	No Equivalence
36	ID401E/ ID402E	Industrial Training / Industrial Practices	1	IN251H	Basic Internship	4	Equivalent
37	MT501E	Welding Technology	4	MT208H	Welding Technology	3	Equivalent
38	MT502E	Corrosion Engineering	4	MT303H	Corrosion Engineering	3	Equivalent
39	MT503E	Alloy steel	4	MT308H	Alloy Steel	3	Equivalent
40	WS501E	Manufacturing Processes	4	WS302H	Manufacturing Processes	3	Equivalent
41	MT504E	Selection of Materials	4	MT307H	Selection Of Material	3	Equivalent
42	ME507E	Production Technology	4	ME212H	Production Technology	3	Equivalent

43	FS501E	Finishing School	2	VE151H	Integrated Personality Development	2	Equivalent
				VE152H	Advanced Personality Development	2	


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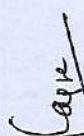
Annexure-II

Equivalence of Courses 2021 to 2023 Curriculum

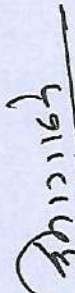
Sr. No.	Courses in 2021 Curriculum			Courses in NEP Aligned 2023 Curriculum			Remark
	Course code	Course Name	Credits	Course code	Course Name	Credits	
1	MH101G	Basic Mathematics	4	MH101H	Basic Mathematics	4	Equivalent
2	EN101G	English	3	EN101H	Communication Skills	3	Equivalent
3	AM101G	Engineering. Mechanics	4	AM101H	Engineering Mechanics	3	Equivalent
4	CH101G	Chemistry	4	CH101H	Applied Chemistry	4	Equivalent
5	LS151G	Life Skills	1	VE151H	Integrated Personality Development	2	Equivalent
				VE152H	Advanced Personality Development	2	
6	IT151G	Introduction to IT Systems	2	CM151H	Basics of computer	2	Equivalent
7	EV151G	Environmental Science	---	VE251H	Environmental Sustainability	2	Equivalent
8	IC151G	Indian Constitution	---	VE351H	Indian Constitution	1	Equivalent
9	MT101G	Basic Metallurgy	4	MT101H	Basic Metallurgy	3	Equivalent
10	MT102G	Mineral Dressing	4	MT204H	Mineral Dressing	3	Equivalent
11	MH102G	Applied Mathematics	4	MH102H	Applied Mathematics	4	Equivalent
12	PH101G	Physics	4	PH101H	Applied Physics	4	Equivalent
13	EN151G	Business Communication	2	EN151H	Business Communication	2	Equivalent
14	ME151G	Engineering Graphics	2	ME155H	Engineering Graphics	2	Equivalent
15	WS151G	Engineering Workshop Practice	2	WS151H	Engineering Workshop Practice	2	Equivalent
16	EX101G	Fundamentals of Electrical and Electronics	5	---	-----		No Equivalence
17	MT201G	Metallurgical	4	MT201H	Metallurgical	3	Equivalent

18	MT202G	Thermodynamics	Foundry Technology	4	MT102H	Thermodynamics	Foundry Technology	3	Equivalent
19	MT203G	Physical Metallurgy	Physical Metallurgy	6	MT207H	Physical Metallurgy	Physical Metallurgy	5	Equivalent
20	MT204G	Iron Making	Iron Making	4	MT202H	Iron Making	Iron Making	3	Equivalent
21	MT205G	Non ferrous Metallurgy	Non ferrous Metallurgy	3	MT305H	Non Ferrous Metallurgy	Non Ferrous Metallurgy	3	Equivalent
22	MT206G	Mechanical Metallurgy	Mechanical Metallurgy	6	MT302H	Mechanical Metallurgy	Mechanical Metallurgy	3	Equivalent
23	ME251G	Computer Aided Drawing	Computer Aided Drawing	3	----	-----	-----	-----	No Equivalence
24	MT207G	Testing Of Materials	Testing Of Materials	5	MT205H	Testing of Materials	Testing of Materials	4	Equivalent
25	MT208G	Heat Treatment	Heat Treatment	6	MT301H	Heat Treatment	Heat Treatment	4	Equivalent
26	MT209G	Steel Making	Steel Making	4	MT206H	Steel Making	Steel Making	3	Equivalent
27	MT210G	Powder Metallurgy	Powder Metallurgy	4	MT203H	Powder Metallurgy	Powder Metallurgy	3	Equivalent
28	MT211G	Welding Technology	Welding Technology	4	MT208H	Welding Technology	Welding Technology	3	Equivalent
29	ME212G	Production Technology	Production Technology	4	ME212H	Production Technology	Production Technology	3	Equivalent
30	MT213G	Corrosion Engineering	Corrosion Engineering	4	MT303H	Corrosion Engineering	Corrosion Engineering	3	Equivalent
31	MT214G	Selection of Materials	Selection of Materials	4	MT307H	Selection Of Material	Selection Of Material	3	Equivalent
32	ES351G	Entrepreneurship and Start up	Entrepreneurship and Start up	3	IN354H	Entrepreneurship & Startup	Entrepreneurship & Startup	1	Equivalent
33	MT301G	Special Casting Techniques	Special Casting Techniques	4	MT306H	Modern foundry Technology	Modern foundry Technology	3	Equivalent
34	MT302G	Metallurgical Analysis	Metallurgical Analysis	5	MT252H	Metallurgical Analysis	Metallurgical Analysis	3	Equivalent
35	MT303G	Metallurgical Quality control	Metallurgical Quality control	3	----	-----	-----	-----	No Equivalence
36	MT351G	Metallurgical Design & Drawing	Metallurgical Design & Drawing	2	MT351H	Metallurgical Design & Drawing	Metallurgical Design & Drawing	2	Equivalent
37	MT304G	Alloy steel	Alloy steel	4	MT308H	Alloy Steel	Alloy Steel	3	Equivalent

38	WS302G	Manufacturing Processes	4	WS302H	Manufacturing Processes	3	Equivalent
39	AE213G	Industrial Management	3	IN353H	Industrial Management	1	Equivalent
40	MT352G	Project	2	MT352H	Capstone project	2	Equivalent
41	IN351G	Internship	15	IN251H	IN251H Internship Basic	4	Equivalent
				IN351H	IN351H Internship Seminar	6	
				IN352H	IN352H Internship Report Writing	6	


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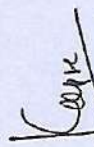
Annexure-I

Equivalence of Courses 2016 to 2023 Curriculum

Sr. No.	Courses in 2016 Curriculum		Courses in NEP Aligned 2023 Curriculum			Remark
	Course code	Course Name	Credits	Course code	Course Name	Credits
1	EN101E	English	4	EN101H	Communication skills	3
2	EN102E	Communication Skills	4	EN151H	Business Communication	2
3	MN101E	Industrial Management	4	IN301H	Industrial Management	1
4	EV101E	Environmental Science	2	VE251H	Environmental Sustainability	2
5	RD101E	Rural Development	1	-	-	-
6	CA201E	Computer Applications	2	CM151H	Basics of Computer	2
7	PH201E	Engineering Physics	5	PH101H	Applied Physics	4
8	CH204E	Applied Chemistry	5	CH101H	Applied Chemistry	4
9	MH201E	Engineering Mathematics	5	MH101H	Basic Mathematics	4
10	MH204E	Applied Mathematics	5	MH104H	Applied Mathematics	4
11	ME302E	Engineering Graphics	4	ME156H	Engineering Graphics	3
12	WS301E	Workshop Practice	2	WS154H	Workshop Practice	2
13	AM303E	Applied Mechanics	5*	---	--	--
14	EE307E	Basic Electrical Technology	5	EE103H	Basic Electricals and Electronics	3
15	EC309E	Applied Electronics	5			
16	TX301E	Fabric Structure and Design	4	TX151H	Elementary Fabric Structure	2
17	TX302E	Advanced Fabric Structure	5	TX252H	Advanced Fabric Structure	3
18	TX401E	Cotton Opening and Cleaning	4	TX201H	Fibre Opening and Cleaning	3
19	TX402E	Sliver Formation	5	TX205H	Sliver Formation	3
20	TX403E	Roving and Yarn Formation	5	TX301H	Roving and Yarn Formation	3
21	TX404E	Yarn Preparation for Weaving	4	TX202H	Yarn Preparation for	3

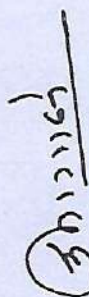
22	TX405E	Yarn Sizing and Loom	4	TX206H	Weaving	3	Equivalent
23	TX406E	Dobby, Jacquard and Auto Loom	5	TX302H	Dobby, Jacquard and Auto Loom	3	Equivalent
24	TX407E	Fibre and Yarn Testing	5	TX204H	Fibre and Yarn Testing	3	Equivalent
25	TX408E	Fabric Testing	5	TX351H	Fabric Testing	3	Equivalent
26	TX409E	Textile processing	4	TX207H	Textile Processing	5	Equivalent
27	TX410E	Knitting Technology	4	TX308H	Knitting Technology	3	Equivalent
28	TX411E	Fibre Science and Technology	4	TX203H	Fibre Science and Technology	3	Equivalent
29	TX412E	Process Control in Spinning	5	TX306H	Process Control in Spinning and Weaving	3	Equivalent
30	TX413E	Process Control in Weaving	5	TX307H	Production Planning and Organization	3	Equivalent
31	TX414E	Production Planning and Organization	5	---	--	---	No Equivalence
32	TX415E	Textile CAD	2	---	---	---	No Equivalence
33	TX416E	Enterprise Resource Planning	2	---	---	---	No Equivalence
34	TX417E	Industrial Project	2	TX352H	Capstone Project	2	Equivalent
35	TX501E	Advanced Yarn Manufacturing	4	TX305H	Advanced Yarn and Fabric Manufacturing	3	Equivalent
36	TX502E	Advanced Fabric Manufacturing	4	TX251H	Garment Technology	2	Equivalent
37	TX503E	Garment Technology	3	TX304H	Nonwoven Technology	3	Equivalent
38	TX504E	Nonwoven Manufacturing	3	TX303H	Technical Textiles	3	Equivalent
39	TX505E	Technical Textiles	3	TX208H	Fabric Merchandising	3	Equivalent
40	TX506E	Apparel Merchandising	3	VE151H	Integrated Personality development	2	Equivalent
41	FS501E	Finishing School	2	VE152H	Advanced Personality development	2	Equivalent
42	TX401E	Cotton Opening and Cleaning	4				Equivalent

	Or TX404E	Or Yarn Preparation for Weaving		TX101H	Elements of Textile Technology	3	Passed in any one course in 2016 curriculum No Equivalence
43	SE401E	Seminar	1	-	-	-	
44	ID403E	Industrial Training	1	IN251H	Basic Internship	4	Equivalent


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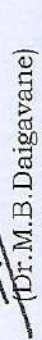
(Dr. G.V. Gotmare)
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Program: Textile Manufacture

Annexure-II

Equivalence of Courses 2021 to 2023 Curriculum

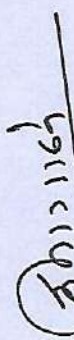
Sr. No.	Courses in 2021 Curriculum		Courses in NEP Aligned 2023 Curriculum		Credits	Remark
	Course code	Course Name	Course code	Course Name		
1	CH101G	Chemistry	CH101H	Applied Chemistry	4	Equivalent
2	MH101G	Basic Mathematics	MH101H	Basic Mathematics	4	Equivalent
3	EN101G	English	EN101H	Communication skills	3	Equivalent
4	AM101G	Engineering. Mechanics	--	---		No Equivalence
5	IT151G	Introduction to IT systems	CM151H	Basics of Computer	2	Equivalent
6	LS151G	Life Skills	VE151H	Integrated Personality development	2	Equivalent
			VE152H	Advanced Personality development	2	
7	IC151G	Indian Constitution	VE351H	Indian Constitution	1	Equivalent
8	EV151G	Environmental Science	VE251H	Environmental Sustainability	2	Equivalent
10	MH104G	Applied Mathematics	MH104H	Applied Mathematics	4	Equivalent
11	EX101G	Fundamentals of Electrical and Electronics Engineering	EE103H	BasicElectricals and Electronics	3	Equivalent
12	PH101G	Physics	PH101H	Applied Physics	4	Equivalent
13	TX101G Or TX102G	Fibre Opening and Cleaning or Yarn Preparation for Weaving	TX101H	Elements of Textile Technology	3	Equivalent
14	TX101G	Fibre Opening and Cleaning	TX201H	Fibre Opening and Cleaning	3	Equivalent
15	TX102G	Yarn Preparation for Weaving	TX202H	Yarn Preparation for Weaving	3	Equivalent
16	EN151G	Business Communication	EN151H	Business Communication	2	Equivalent
17	WS151G	Engineering Workshop Practice	WS154H	Workshop Practice	2	Equivalent
18	ME151G	Engineering Graphics	ME156H	Engineering Graphics	3	Equivalent

19	TX201G	Sliver Formation	4	TX205H	Sliver Formation	3	Equivalent
20	TX202G	Yarn Sizing and Loom	4	TX206H	Yarn Sizing and Loom	3	Equivalent
21	TX203G	Pre Treatment and Finishing	4	TX207H	Textile Processing	5	Equivalent
22	TX210G	Dyeing and Printing	4				
23	TX204G	Fibre and Yarn Testing	4	TX204H	Fibre and Yarn Testing	3	Equivalent
24	TX205G	Fibre Science and Technology	3	TX203H	Fibre Science and Technology	3	Equivalent
25	TX206G	Garment Technology	4	TX251H	Garment Technology	2	Equivalent
26	TX207G	Apparel Merchandising	4	TX208H	Fabric Merchandising	3	Equivalent
27	TX251G	Fabric Structure and Design	2	TX151H	Elementary Fabric Structure	2	Equivalent
28	TX208G	Roving and Yarn Formation	4	TX301H	Roving and Yarn Formation	3	Equivalent
29	TX209G	Dobby, Jacquard and Auto Loom	4	TX302H	Dobby, Jacquard and Auto Loom	3	Equivalent
30	TX210G	Dyeing and Printing	4	TX207H	Textile processing	5	Equivalent
31	TX211G	Advanced Fabric Structure	4	TX252H	Advanced Fabric Structure	3	Equivalent
32	TX212G	Advanced Yarn and Fabric Manufacturing	5	TX305H	Advanced Yarn and Fabric Manufacturing	3	Equivalent
33	TX213G	High Performance Fibre	5	TX309H	High Performance Fibre	3	Equivalent
34	TX214G	Knitting Technology	4	TX308H	Knitting Technology	3	Equivalent
35	TX215G	Textile Composite		-----	-----		No Equivalence
36	ES351G	Entrepreneurship and Start up	3	IN353H	Entrepreneurship and Start up	1	Equivalent
37	TX301G	Process Control in Spinning	4		Process Control in Spinning and Weaving	3	Equivalent
38	TX302G	Process Control in Weaving	4	TX306H			
39	TX303G	Fabric Testing	5	TX351H	Fabric Testing	3	Equivalent
40	TX304G	Production Planning and Organization	5	TX307H	Production Planning and Organization	3	Equivalent
41	TX305G	Technical Textiles	4	TX303H	Technical Textiles	3	Equivalent
42	AE213G	Industrial Management	3	IN301H	Industrial Management	1	Equivalent

43	TX351G	Project	2	TX352H	Capstone Project	2	Equivalent
44	IN351G	Internship	15	IN251H	Basic Internship	4	Equivalent
				IN351H	Internship(Seminar)	6	Equivalent
				IN352H	Internship (Report Writing)	6	Equivalent


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Program: Automobile Engineering

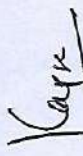
Annexure-I

Equivalence of Courses 2016 to 2023 Curriculum

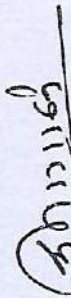
Sr. No.	Courses in 2016 Curriculum			Courses in NEP Aligned 2023 Curriculum			Remark
	Course Code	Course Name	Credits	Course Code	Course Name	Credits	
1	EN101E	English	4	EN101H	Communication Skills	3	Equivalent
2	EN102E	CommunicationSkills	2	EN151H	Business Communication	2	Equivalent
3	MN101E Or AE409E	Industrial Management	4	IN302H	Auto Service and Industrial Management	1	Equivalent
		Auto Service Management	5				
4	EV101E	Environmental Science	Nil	VE251H	Environmental Sustainability	2	Equivalent
5	RD101E	Rural Development	1	-	-	-	No Equivalence
6	CA201E	Computer Application	2	CM151H	Basics of Computer	2	Equivalent
7	PH201E	Engineering Physics	5	PH101H	Applied Physics	4	Equivalent
8	CH201E	Applied Chemistry	5	CH101H	Applied Chemistry	4	Equivalent
9	MH201E	Engineering Mathematics	5	MH101H	Basic Mathematics	4	Equivalent
10	MH202E	Applied Mathematics	5	MH102H	Applied Mathematics	4	Equivalent
11	AE301E	Automobiles Engineering Graphics	6	AE151H	Automotive Engineering Graphics	3	Equivalent
12	WS301E	Workshop Practice	2	AE152H	Automobile Workshop Practice	2	Equivalent
13	AM301E	Engineering. Mechanics	5	AM205H	Auto Mechanics & Strength of Materials	3	Equivalent
14	AM407E	Strength of Materials	5				
15	EE305E or EC306E	Basics of Electrical System or Electronics System for Automobile	4	AE101H	Fundamentals of Automotive Electrical & Electronics	3	Equivalent
		Materials & Manufacturing Processes	4				
16	AE302E	Materials & Manufacturing Processes	5	AE102H	Automotive Materials & Manufacturing	3	Equivalent

17	ME303E	Thermal Engineering	4	AE201H	Applied Engine Thermodynamics	3	Equivalent
18	AE401E	Automobile Transmission System	4	AE203H	Automotive Transmissions Systems	3	Equivalent
19	AE402E	Theory of Machine	4	AE202H	Theory of Machines & Mechanisms	3	Equivalent
20	AE403E	Vehicular System and Body Engg.	5	AE206H	Vehicle Controls & Systems	4	Equivalent
21	AE404E	Automobile Manufacturing Process	4	AE204H	Advanced Manufacturing Processes	4	Equivalent
22	AE405E	Design of Automobile Components	5	AE251H	Basics of Design	2	Equivalent
23	AE406E	Automobile Engine	4	AE205H	Automobile Engines & Systems	4	Equivalent
24	AE407E	Advanced Automobile Engines	5	AE301H	Advanced Automotive Engines	3	Equivalent
25	AE408E	Automobile Electrical & Electronics	5	AE302H	Advance Automotive Electrical & Electronics Systems	3	Equivalent
26	AE410E	Hydraulics & Pneumatics	5	AE307H	Automotive Hydraulic & Pneumatics Systems	3	Equivalent
27	AE411E	Transport Management	4	AE308H	Vehicle Transport Management	3	Equivalent
28	AE412E	Automobile Engineering Drawing	4	AE153H	Automotive Engineering Drawing	2	Equivalent
29	AE413E	Computer Aided Drafting	2	-	-	-	No Equivalence
30	AE414E	Vehicle Driving Practice	2	-	-	-	No Equivalence
31	AE415E	Automobile Service Practice	3	AE252H	Vehicle Maintenance Practices	3	Equivalent
32	AE416E	Project	2	AE352H	Capstone Project	2	Equivalent
33	SE401E	Seminar	1	-	-	-	No Equivalence
34	ID401E/ ID402E	Industrial Training / Industrial Practices	1	IN251H	Basic Internship	4	Equivalent

35	AE501E	Automobile Infotronics	4	AE351H	Autotronics & Vehicle Diagnostics	3	Equivalent
36	AE502E	Automobile Aerodynamics	4	-	-	-	No Equivalent
37	AE503E	CAD/CAM	4	AE305H	Automotive CAD/CAM	3	Equivalent
38	AE504E	Automobile Air Conditioning System	4	AE303H	Automotive HVAC Systems	3	Equivalent
39	AE505E	Earth Moving Machine	4	AE309H	Earth Moving & Special Purpose Vehicles	3	Equivalent
40	AE506E	Alternative Fuel System	4	-	-	-	No Equivalence
41	FS501E	Finishing School	2	VE151H	Integrated Personality Development	2	Equivalent
				VE152H	Advanced Personality Development	2	

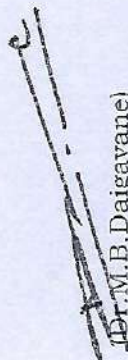

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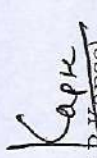
Annexure-II

Equivalence of Courses 2021 to 2023 Curriculum

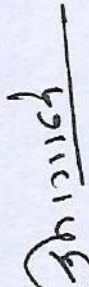
Sr. No.	Courses in 2021 Curriculum			Courses in NEP Aligned 2023 Curriculum			Remark
	Course Code	Course Name	Credits	Course Code	Course Name	Credits	
1	MH101G	Basic Mathematics	4	MH101H	Basic Mathematics	4	Equivalent
2	PH101G	Physics	4	PH101H	Applied Physics	4	Equivalent
3	EN101G	English	3	EN101H	Communication Skills	3	Equivalent
4	ME101G	Engineering Graphics	3	AE151H	Automotive Engineering Graphics	3	Equivalent
5	WS151G	Engineering Workshop Practice	2	AE152H	Automobile Workshop Practice	2	Equivalent
6	AE151G	IT Applications in Automobiles	2	CM151H	Basics of Computer	2	Equivalent
7	LS151G	Life Skills	1	VE151H	Integrated Personality Development	2	Equivalent
				VE152H	Advanced Personality Development	2	
8	IC151G	Indian Constitution	Nil	VE351H	Indian Constitution	1	Equivalent
9	MH102G	Applied Mathematics	4	MH102H	Applied Mathematics	4	Equivalent
10	CH101G	Chemistry	4	CH101H	Applied Chemistry	4	Equivalent
11	AE101G	Basics of Electricals & Electronics	5	AE101H	Fundamentals of Automotive Electrical & Electronics	3	Equivalent
12	AE102G	Automotive Materials & Manufacturing	4	AE102H	Automotive Materials & Manufacturing	3	Equivalent
13	EN151G	Business Communication	2	EN151H	Business Communication	2	Equivalent
14	AE152G	Automotive Engineering Drawing	3	AE153H	Automotive Engineering Drawing	2	Equivalent
	AE251G	Body in White Design	2				
15	EV151G	Environmental Science	Nil	VE251H	Environmental Sustainability	2	Equivalent

16	AE201G	Engine Thermodynamics	4	AE201H	Applied Engine Thermodynamics	3	Equivalent
17	AM101G	Engineering, Mechanics	4	AM205H	Auto Mechanics & Strength of Materials	3	Equivalent
	AM201G	Strength of Materials	4				
18	AE202G	Automotive Transmission Systems	4	AE203H	Automotive Transmissions Systems	3	Equivalent
19	AE203G	Automotive Manufacturing Processes	4	AE204H	Advanced Manufacturing Processes	4	Equivalent
20	AE204G	Auto Machines and Mechanisms	4	AE202H	Theory of Machines & Mechanisms	3	Equivalent
21	AE205G	Automobile Engines	4	AE205H	Automobile Engines & Systems	4	Equivalent
22	AE206G	Advanced Auto Engines	4	AE301H	Advanced Automotive Engines	3	Equivalent
23	AE207G	Automotive Control & Comfort Systems	4	AE206H	Vehicle Controls & Systems	4	Equivalent
24	AE208G	Design of Auto Components	4	AE251H	Basics of Design	2	Equivalent
25	AE252G	Vehicle Maintenance & Servicing	3	AE252H	Vehicle Maintenance Practices	3	Equivalent
26	AE209G	Quality Control & Measurement	4	AE304H	Measurement & Quality Control	3	Equivalent
27	AE210G	Automotive Air Conditioning	4	AE303H	Automotive HVAC Systems	3	Equivalent
28	AE211G	Two & Three-Wheeler Technology	4	AE207H	Two Wheeler Technology	3	Equivalent
29	AE212G	Automotive Aerodynamics	4	-	-	-	No Equivalence
30	AE306G Or AE213G	Automobile Service Management	4	IN302H	Auto Service and Industrial Management	1	Equivalent
		Or Industrial Management	3				
31	AE301G	Automotive Hydraulics & Pneumatics	4	AE307H	Automotive Hydraulic & Pneumatics Systems	3	Equivalent
32	AE302G	Automotive Electrical & Electronics*	4	AE302H	Advance Automotive Electrical & Electronics Systems	3	Equivalent

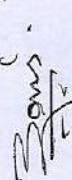
33	AE303G	Electric Vehicles and Infotonics	4	AE306H	Electric Vehicle Technology	3	Equivalent
34	AE304G	Motor Transport Management	4	AE308H	Vehicle Transport Management	3	Equivalent
35	AE305G	Automotive CAD/CAM	4	AE305H	Automotive CAD/CAM	3	Equivalent
36	AE351G	Major Project	2	AE352H	Capstone Project	2	Equivalent
37	AE352G	Auto Ventures Entrepreneurships & Start-up	3	IN353H	Entrepreneurship & Startup	2	Equivalent
38	IN351G	Internship ^{\$}	6	IN251H	Internship (Basic)	4	Equivalent
				IN351H	Internship (Seminar)	6	
				IN352H	Internship (Report Writing)	6	

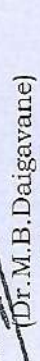

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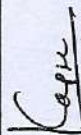
Program: Travel and Tourism

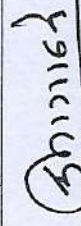
Annexure-I

Equivalence of Courses 2016 to 2023 Curriculum

Sr. No.	Courses in 2016 Curriculum			Courses in NEP Aligned 2023 Curriculum			Remarks
	Corse Code	Course Name	Credits	Corse Code	Course Name	Credits	
1	EN101E	English	4	EN151H	Business Communication	2	Equivalent
2	EN102E	Communication Skills	4	EN101H	Communication Skills	3	Equivalent
3	TR101E	Spoken French	4	TR352H	Spoken French	3	Equivalent
4	EV101E	Environmental Science	2	VE251H	Environmental Science	2	Equivalent
5	RD101E	Rural Development	1	-	-	-	No Equivalence
6	TR201E	IT Application	4	CM151H	Basics Of Computers	2	Equivalent
7	TR202E	Database Operation	4	-	-	-	No Equivalence
8	TR203E	Basic Accounts	6	-	-	-	No Equivalence
9	TR204E	Profile of Tourism Industry	6	TR101H	Profile of Tourism Industry	3	Equivalent
10	TR205E	Entrepreneurship Development	4	IN354H	Entrepreneurship & Start Up	3	Equivalent
11	TR301E	Tourism in Northern States of India	5	TR204H	Tourism in Northern states of India	4	Equivalent
12	TR302E	Tourism in Southern States of India	5	TR206H	Tourism in Southern states of India	4	Equivalent
13	TR303E	Cultural Heritage Of India	6	TR102H	Architectural Heritage of India	3	Equivalent
14	TR304E	Cultural Traditions of India	5	TR104H	Cultural Traditions of India	3	Equivalent
15	TR305E	Key Skills for Self Development	5	TR151H	Key Skills for Self Development	4	Equivalent
16	TR306E	Employability Skills	5	TR152H	Employability Skills	4	Equivalent
17	TR307E	Hotel Operation	4	TR103H	Hotel Operation	3	Equivalent
18	TR401E	Travel Documentation	4	TR251H	Travel Documentation	3	Equivalent
19	TR402E	Travel Agency Operations	4	TR201H	Travel Agency Operations	4	Equivalent
20	TR403E	Tour Operations	4	TR207H	Tour Operations	3	Equivalent
21	TR404E	Marketing and Sales Techniques	5	TR301H	Marketing & Sales Techniques	4	Equivalent

22	TR405E	International Travel Geography	5	TR105H	International Travel Geography	3	Equivalent
23	TR406E	World Tourism - America & Europe	4	TR202H	World Tourism America	3	Equivalent
24	TR407E	World Tourism - Africa, Australasia	4	TR205H	World Tourism Asia & Europe	4	Equivalent
25	TR408E	Basic Airfare & Ticketing	5	TR302H	World Tourism Australia & Africa	4	Equivalent
26	TR409E	Business and Incentive Travel	5	TR252H	Basic Airfare & Ticketing	3	Equivalent
27	ID404E	Industrial Training	28	TR203H	Business and Incentive Travel	3	Equivalent
28	TR501E	Advance Airfare and Ticketing	5	IN355H	Internship & Report Writing	22	Equivalent
29	TR502E	Basic Guide Training	5	TR353H	Project	2	Equivalent
30	TR503E	Medical Tourism	5	-	-	-	No Equivalence
31	TR504E	Adventure Tourism	5	TR107H	Basic Guide Training	3	Equivalent
32	FS501E	Finishing School	2	TR209H	Medical Tourism	5	Equivalent
				TR208H	Adventure Tourism	5	Equivalent
				VE151H	Integrated Personality Development	2	Equivalent
				VE152H	Advanced Personality Development	2	Equivalent


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Program: Travel and Tourism

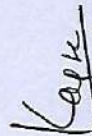
Annexure-II

Equivalence of Courses 2021 to 2023 Curriculum

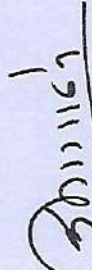
Sr. No.	Courses in 2021 Curriculum			Courses in NEP Aligned 2023 Curriculum			Remarks
	Corse Code	Course Name	Credits	Corse Code	Course Name	Credits	
1	EN101G	English	3	EN101H	Communication Skills	3	Equivalent
2	TR101G	Profile of Tourism Industry	4	TR101H	Profile of Tourism Industry	3	Equivalent
3	TR102G	Architectural Heritage of India	4	TR102H	Architectural Heritage of India	3	Equivalent
4	IT151G	Introduction to IT	2	CM151H	Basics of Computers	2	Equivalent
5	EV151G	Environmental Science	2	VE251H	Environmental Sustainability	2	Equivalent
6	IC151G	Indian Constitution	1	VE351H	Indian Constitution	1	Equivalent
7	TR151G	Key Skills for Self-Development	4	TR151H	Key Skills for self-Development	4	Equivalent
8	TR103G	Cultural Traditions of India	4	TR104H	Cultural Traditions of India	3	Equivalent
9	TR104G	Hotel Operations	4	TR103H	Hotel Operations	3	Equivalent
10	TR105G	International Travel Geography	5	TR105H	International Travel Geography	3	Equivalent
11	TR152G	Employability Skills	4	TR152H	Employability Skills	4	Equivalent
12	EN151G	Business Communication	2	EN151H	Business Communication	2	Equivalent
13	TR106G	Tourism in Maharashtra	4	TR106H	Tourism In Maharashtra	3	Equivalent
14	LS151G	Life Skills	1	VE151H	Integrated Personality Development	2	Equivalent
				VE152H	Advanced Personality Development	2	

15	TR201G	Travel Documentation	4	TR251H	Travel Documentation	3	Equivalent
16	TR202G	Travel Agency Operations	5	TR201H	Travel Agency Operations	4	Equivalent
17	TR203G	World Tourism - America	3	TR202H	World Tourism America	4	Equivalent
18	TR204G	World Tourism - Europe	3	TR205H	World Tourism- Asia and Europe	4	Equivalent
19	TR205G	Business and Incentive Travel	5	TR203H	Business and Incentive Travel	3	Equivalent
20	TR206G	Tourism in Northern States of India	5	TR204H	Tourism In Northern States of India	4	Equivalent
21	TR207G	Basic Airfare and Ticketing	5	TR252H	Basic Airfare and Ticketing	3	Equivalent
21	TR208G	World Tourism - Asia	4	TR205H	World Tourism - Asia and Europe	4	Equivalent
22	TR209G	Tourism in Southern States of India	5	TR206H	Tourism in Southern states of India	3	Equivalent
23	TR210G	Tour Operations	4	TR207H	Tour Operations	3	Equivalent
24	TR211G	Adventure Tourism	5	TR208H	Adventure Tourism	5	Equivalent
25	TR212G	Medical Tourism	5	TR209H	Medical Tourism	5	Equivalent
26	TR252G	Spoken French	4	TR352H	Spoken French	3	Equivalent
27	TR301G	Marketing and Sales Techniques	5	TR301H	Marketing & Sales Techniques	4	Equivalent
28	TR302G	World Tourism-Australia and Africa	5	TR302H	World Tourism-Australia and Africa	4	Equivalent
29	TR303G	Basic Guide Training	5	TR107H	Basic Guide Training	3	Equivalent
30	TR304G	Web Application in Tourism	5	TR351H	Web Application in Tourism	3	Equivalent
31	TR351G	Project	2	TR353H	Project	2	Equivalent
32	ES351G	Entrepreneurship and Start up	3	IN354H	Entrepreneurship & Start Up	3	Equivalent

33	IN351G	Internship	15	IN353H	Internship & Report Writing	22	Equivalent
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Equivalence of Courses 2020 to 2023 Curriculum

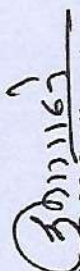
Sr.	Courses in 2016 Curriculum			Courses in NEP Aligned 2023 Curriculum		
	Course Code	Course Name	Credits	Course Code	Course Name	Remark
1	PH101G	Physics	4	PH101H	Applied Physics	Equivalent
2	EN101G	English	3	EN101H	Communication Skills	Equivalent
3	MH101G	Basic Mathematics	4	MH101H	Basic Mathematics	Equivalent
4	ME101G	Engineering Graphics	3	MK151H	Engineering Graphics (Mechatronics)	Equivalent
5	WS151G	Engg. Workshop Practice	2	WS155H	Workshop and Machining Tool Practice	Equivalent
6	LS151G	Life Skills		VE151H	Integrated Personality Development	Equivalent
				VE152H	Advanced Personality Development	
7	IC151G	Indian Constitution	Grade	VE351H	Indian Constitution	Equivalent
8	EV151G	Environmental Science	Grade	VE251H	Environmental Sustainability	Equivalent
9	CH101G	Chemistry	4	CH101H	Applied Chemistry	Equivalent
10	MH103G	Applied Mathematics	4	MH103H	Applied Mathematics	Equivalent
11	AM101G	Engg. Mechanics	4	-	-	No Equivalent Course
12	EX101G	Fundamentals of Electrical and Electronics	5	EE103H	Basic Electrical and Electronics	Equivalent
13	ME102G	Elements of Mechanical Engg.	4	MK101H	Basics of Mechanical Engineering	Equivalent
14	IT151G	Introduction to IT systems	2	CM151H	Basics of Computers	Equivalent
15	MC101G	C - Programming	3	MK152H	Basic 'C' Programming	Equivalent
16	EN151G	Business Communication	2	EN151H	Business Communication	Equivalent

19	MC201G	Basics of Mechatronics	3	MK202H	Fundamentals of Mechatronics	3	Equivalent
20	MC202G	Analog electronics	4	MK201H	Analog and Digital Electronics	3	Equivalent
23	ME203G	Engineering Drawing	4	-	-	-	No Equivalent
24	WS201G	Manufacturing Process	4	MK207H	Manufacturing Process	4	Equivalent
25	MC204G	Metrology & Instrumentation	4	MK203H	Metrology and Measurement	3	Equivalent
26	AM201G	Strength of Materials	4	-	-	-	No Equivalent
27	MC251G	Computer Aided Drafting	3	MK252H	Computer Aided Design	3	Equivalent
30	MC205G	Computer Communication Networking	4	MK306H	Computer Communication Networking	3	Equivalent
31	MC206G	Communication Engineering	4	MK302H	Communication Engineering	3	Equivalent
32	MC207G	Microcontroller	5	MK205H	Microcontroller	4	Equivalent
33	MC208G	Industrial Automation	4	MK209H	Industrial Automation	3	Equivalent
34	MC209G	Computer Integrated Manufacturing	4	MK208H	Computer Integrated Manufacturing	3	Equivalent
35	ME210G	Theory of Machines	4	MK204H	Theory of Machines	3	Equivalent
36	MC211G	Industrial Fluid Power	4	MK206H	Industrial Fluid Power	4	Equivalent
38	ES351G	Entrepreneurship & Startup	3	IN353H	Entrepreneurship & Startup	1	Equivalent
39	AE213G	Industrial Management	3	IN301H	Industrial Management	1	Equivalent
41	MC301G	Control System (ETC)	4	MK301H	Control Systems	3	Equivalent
42	MC302G	PLC Scada programming	5	MK307H	PLC-SCADA Programming	3	Equivalent
43	MC303G	Solid Modelling & Additive Manufacturing	4	MK351H	Additive Manufacturing and 3D Printing	3	Equivalent
44	MC304G	Embedded System Design	4	MK303H	Embedded System Design	3	Equivalent
45	MC305G	Automotive Mechatronics	4	MK304H	Automotive Mechatronics	3	Equivalent
46	MC306G	Robotics	4	MK305H	Robotics & Automation	3	Equivalent

47	MC351G	CNC Machine Technology	2	MK210H	CNC Programming	3	Equivalent
48	PJ351G	Major Project	2	MK352H	Capstone Project	2	Equivalent
49	IN351G	Internship	15	IN251H	Internship (Basic)	4	Equivalent
				IN351H	Internship (Seminar)	6	
				IN352H	Internship (Report Writing)	6	


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Program: Artificial Intelligence and Machine Learning
Equivalence of Courses 2021 to 2023 Curriculum

Annexure II

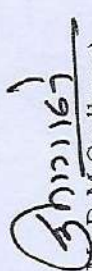
Sr. No.	Courses in 2021 Curriculum			Courses in NEP Aligned 2023 Curriculum			Remark
	Course code	Name of course	Credits	Course code	Name of course	Credits	
1	MH101G	Basic Mathematics	4	MH101H	Basic Mathematics	4	Equivalent
2	CH101G	Chemistry	4	CH101H	Applied Chemistry	4	Equivalent
3	EC104G	Principles of Electronics	4	EC109H	Basics of Electronics	3	Equivalent
4	EN101G	English	3	EN101H	Communication Skills	3	Equivalent
5	CM151G	Computer Workshop	2	CM152H	Computer Workshop	2	Equivalent
6	IT151G	Introduction to IT Systems	2	CM151H	Basics of Computer	2	Equivalent
7	ME151G	Engineering Graphics	2	-	-	-	No Equivalence
8	IC151G	Indian Constitution	-	VE351H	Indian Constitution	1	Equivalent
9	MH102G	Applied Mathematics	4	MH102H	Applied Mathematics	4	Equivalent
10	PH101G	Physics	4	PH101H	Applied physics	4	Equivalent
11	EE101G	Basics of Electrical Engineering	4	-	-	-	No Equivalence
12	IT101G	Basics of Programming	5	IT101H	Basics of Programming	4	Equivalent
13	EN151G	Business communication	2	EN151H	Business communication	2	Equivalent
14	LS151G	Life Skills	1	VE151H VE152H	Integrated personality development Advanced personality development	2 2	Equivalent
15	EV151G	Environmental Science	-	VE251H	Environmental Sustainability	2	Equivalent
18	AI201G	Introduction to Artificial Intelligence	4	AI201H	Introduction to Artificial Intelligence	3	Equivalent
19	IT202G	Computer Network	4	-	-	-	No Equivalence
20	CM202G	Data Structure	5	CM201H	Data Structure	3	Equivalent
21	IT203G	Object Oriented Programming	4	IT202H	Object Oriented Programming	3	Equivalent

22	AI202G	Statistics and Probability for Machine Learning	4	AI202H	Statistics and Probability for Machine Learning	2	Equivalence
23	CM204G	Relational Database Management System	4	CM204H	Database Management System	4	Equivalent
24	AI251G	Python Lab	2	AI251H	Python Programming	2	Equivalent
26	AI203G	Introduction to Machine Learning	4	AI204H	Machine Learning	4	Equivalent
27	AI204G	R Programming	4	-	-	-	No Equivalence
28	AI205G	Design and Analysis of Algorithms	4	AI304H	Design and Analysis of Algorithms	3	Equivalent
29	IT207G	Java Programming	4	IT302H IT304H	Java Programming Advance Java	4 3	Equivalent
30	AI206G	Introduction to IoT	2	AI351H	Introduction to IoT	2	Equivalent
31	AE213G	Industrial Management	3	IN301H	Industrial Management	1	Equivalent
32	AI207G	Cloud Computing	4	AI301H	Cloud Computing	3	Equivalent
33	IT208G	Data Mining and Data Warehouse	4	IT306II	Data Warehousing and Mining	3	Equivalent
34	IT210G	Web Programming with Python	4	AI252H	Web Programming	3	Equivalent
35	AI208G	Introduction to Intelligent Vision	4	AI206H	Introduction to Intelligent Vision	4	Equivalent
36	IT301G	Operating System	4	IT301H	Operating System	3	Equivalent
37	AI301G	Introduction to Deep Learning	4	AI303H	Deep Learning	3	Equivalent
38	AI302G	Big Data Analytics using Hadoop	4	-	-	-	No Equivalence
39	IT206G	Software Engineering	4	AI205H	Elective Software Engineering	4	Equivalent
40	ES351G	Entrepreneurship and Start up	3	IN353H	Entrepreneurship & Startup	1	Equivalent
41	AI304G	Data Analytics	4	AI203H	Data Analytics	4	Equivalent

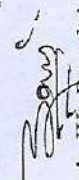
42	AI305G	Natural Language Processing	4	AI302H	Natural Language Processing	3	Equivalent
45	IT351G	Project	2	AI352H	Capstone Project	2	Equivalent
46	IN351G	Internship	15	IN251H IN351H IN352H	Basic Internship Internship (Seminar) Internship (Report Writing)	4 6 6	Equivalent


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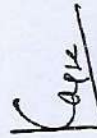

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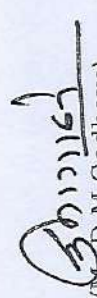

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Equivalence of 2016 Free Elective Courses with NEP aligned 2023 Generic Elective Courses Annexure III

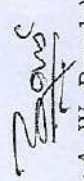
Sr. No.	Courses in 2016 Curriculum			Courses in NEP Aligned 2023 Curriculum			Remarks
	Course code	Name of course	Credits	Course code	Name of course	Credits	
1	FE501E	Basic Building Drawing	2	-	-	-	No Equivalent
2	FE502E	RAC Maintenance	2	-	-	-	No Equivalent
3	FE503E	Electrical Maintenance	2	-	-	-	No Equivalent
4	FE504H	Hobby Electronics	2	-	-	-	No Equivalent
5	FE505E	Basic Packaging Technology	2	PK29 1H	Basics of Packaging Technology	2	Equivalent
6	FE506E	Industrial Metallurgical Practices	2	-	-	-	No Equivalent
7	FE507E	Computer Network	2	-	-	-	No Equivalent
8	FE508E	PC Architecture & Maintenance	2	-	-	-	No Equivalent
9	FE509E	Fabric Selection and Care	2	-	-	-	No Equivalent
10	FE510E	Two & Four-Wheeler Technology	2	-	-	-	No Equivalent
11	FE511E	Energy Conservation and Management	2	-	-	-	No Equivalent
12	FE512E	Learning Ability Development	2	-	-	-	No Equivalent


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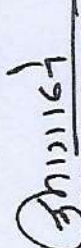

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Equivalence of 2021 Open Elective Courses with NEP aligned 2023 Generic Elective Courses

Annexure IV

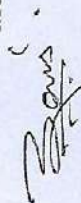
Sr. No.	Courses in 2021 Curriculum		Courses in NEP Aligned 2023 Curriculum			Remarks
	Course code	Name of course	Credits	Course code	Name of course	Credits
1	OE201G	Industry 4.0	2	-	-	-
2	OE203G	Introduction to E-Governance	2	-	-	-
3	OE204G	Cyber Securities and Laws	2	-	-	-
4	OE206G	Energy Waste Management	2	-	-	-
5	OE207G	Total Quality Management	2	-	-	-
6	OE208G	Additive Manufacturing & 3D Printing	2	-	-	-
7	OE210G	Renewable Energy Sources for Mobility	2	-	-	-
8	OE211G	Selection of Materials	2	-	-	-
9	OE212G	Non Destructive Testing	2	-	-	-
10	OE215G	Renewable Energy Technologies	2	-	-	-
11	OE216G	Energy Conservation Opportunities	2	-	-	-
12	OE217G	Electric Vehicle	2	-	-	-
13	OE218G	Artificial Intelligence	2	-	-	-
14	OE220G	Green Building	2	AI292H	Basics of Artificial Intelligence	2
15	OE221G	Building Services	2	-	-	-
16	OE222G	Mechatronics**	2	-	-	-
17	OE223G	Technological Evolution In Computer	2	MK291H	Basic Mechatronics	2
18	OE224G	MOOC	2	-	-	-
				NP291H	Any NETEL Equivalent Course	2
						Equivalent MOOCs Course


(Dr. C.P. Kapse)
I/C HOD, Textile Manufacture
Member


(Mr. D.M. Gadhave)
Controller of Examination
Member


(Dr. M.V. Sarode)
HOD, Computer Engineering
Member


(Dr. G.V. Gotmare)
I/C, Curriculum Development Cell
Member Secretary

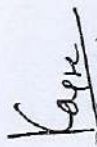

(Dr. A.W. Pawde)
HOD, Civil Engineering
Chairman


(Dr. M.B. Daigavane)
Principal,
Government Polytechnic, Nagpur

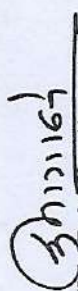
Annexure V

Exemption of Courses of First Semester and Second Semester as per NEP aligned 2023 Curriculum for First Year admitted students having HSC Science Qualification.

Sr.No.	Name of Programs	HSC (Science) passed Subjects	Exemption Courses with Credits	Remarks
1	1. Civil Engineering	Physics with Minimum 40% Marks	PH101H- Applied Physics- (4 Credits)	
	2. Mechanical Engineering	Chemistry with Minimum 40% Marks	CH101H- Applied Chemistry- (4 Credits)	
	3. Electrical Engineering	Mathematics with Minimum 40% Marks	MH101H- Basic Mathematics- (4 Credits)	
	4. Electronics & Telecommunication Engineering	Mathematics with Minimum 40% Marks	MH102H- Applied Mathematics - (4 Credits)	
	5. Information Technology	Mathematics with Minimum 40% Marks	MH103H- Applied Mathematics - (4 Credits)	
	6. Metallurgical Engineering	Mathematics with Minimum 40% Marks	MH104H- Applied Mathematics - (4 Credits)	
	7. Textile Manufacture			
	8. Automobile Engineering			
	9. Packaging Technology			
	10. Computer Engineering			
	11. Mechatronics			
	12. Artificial Intelligence and Machine Learning			

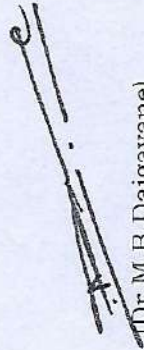

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Member


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Member Secretary


(Mr. D.M. Gadhave)
Controller of Examination
Member

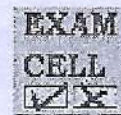

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Principal,
Government Polytechnic, Nagpur



GOVERNMENT POLYTECHNIC, NAGPUR
(AN AUTONOMOUS INSTITUTE OF GOVT. OF MAHARASHTRA)



To be used by Programme Head / Department

ECM

To,
The Controller of Examinations
Govt. Polytechnic Nagpur.

Subject:- Grant of exemption for courses passed & carry over marks of pass heads of failed courses switching over from old curriculum to revised curriculum.

The student (Name)

Enrolment No. has applied for exemption in passing heads of old curriculum course/s and carry over the marks of passing heads of failed courses of old curriculum to the respective equivalent heads of courses of Revised Curriculum.

The exemption is granted accordingly and permitted to carry over marks of pass heads of failed courses of old curriculum for following revised courses.

SN	Old (2016/2021) Curriculum		Exemption Granted in Revised (2023) Curriculum		Carry over marks of pass heads of failed courses of old (2016/2021) Curriculum to respective heads of equivalence course of Revised (2023) Curriculum.										
	Course Code	Credits acquired	Course Code	Credits acquired	Course Code	CL-SA		CL-FA		LL-SA		LL-FA		SL-SA	
						Max	Obt	Max	Obt	Max	Obt	Max	Obt	Max	Obt

In Revised (2023) Scheme for courses passed:-

Total Courses granted exemption:

Total credits granted:

Signature of Lecturer In-charge

Signature of Program Head

Please allot Revised Enrolment No. and inform to program Head.

Note:- Program Heads are requested to refer Equivalence Chart for exemption granted to passed courses which is approved by Equivalence Committee.

To,
The Principal
Govt. Polytechnic Nagpur.

STF

Through :- The Program Head,

Subject:- Transfer from Old (2016/2021) curriculum to Revised (2023) curriculum.

Sir,

I, the undersigned was admitted in your institute in the year/term in Program. My enrollment number is

My performance in the following courses Old (2016/2021) curriculum is as shown in the table.

Examination Details:

[illegible]

In Old Curriculum scheme:- 1. Total Courses Passed

2. Total Courses Failed

Kindly grant me the exemption in the passing head of the courses of Old curriculum and carry over the same in the equivalent passing heads of courses of Revised curriculum. I will complete the remaining passing heads of the courses as per the Revised curriculum. I should not be given exemption in the courses, which contribute for Award of Class of revised curriculum.

Date:-

Signature of Student

Name:-.....

Enrolment No.:

Note:- All attested marksheets are have to attach herewith

(Attach separate sheet if required)