

# **SHRI VISHWAKARMA SKILL UNIVERSITY**

(Enacted by the Act 25 of 2016, State of Haryana)

**DUDHOLA, PALWAL**



**D. Voc. Industrial Electronics  
Batch 2020-23**

## Scheme

Semester-I															
Category	Subject Code	Subject Name	Credits			Marks							Hrs		
						Theory			Practical			Total			
			T	P	TO	I	E	TO	I	E	TO	(T+P)	T	P	TO
General Education Component	ENG301	Language (English)	3	1	4	15	35	50	35	15	50	100	45	30	75
	ENG301L	Language (English)-Lab													
	MTH301	Applied Mathematics-I	4	0	4	30	70	100	-	-	-	100	60		60
	EVS301	EVS	4	0	4	30	70	100	-	-	-	100	60		60
		Total	11	1	12	75	175	250	35	15	50	300	165	30	195
	EED 301	Electrical Engineering Drawing	0	3	3	-	-	-	70	30	100	100	-	90	90
	PHY301	Applied Physics	2	1	3	15	35	50	35	15	50	100	45	30	75
	PHY301L	Applied Physics Lab													
	OJT301	OJT	0	12	12	-	-	-	245	105	350	350	0	540	540
		Total	2	16	18	15	35	50	350	150	500	550	45	660	705
Grand Total			13	17	30	90	210	300	385	165	550	850	210	690	900

Semester-II															
Category	Subject Code	Subject Name	Credits			Marks							Hrs		
						Theory			Practical			Total			
			T	P	TO	I	E	TO	I	E	TO	(T+P)	T	P	TO
General Education Component	CHM301	Chemistry	3	1	4	15	35	50	35	15	50	100	45	30	75
	CHM301L	Chemistry -Lab													
	MTH302	Applied Mathematics-II	4	0	4	30	70	100	-	-	-	100	60		60
	PSY302	Value Education	3	0	3	30	70	100	-	-	-	100	60		60
		Total	10	1	11	75	175	250	35	15	50	300	165	30	195
Skill Education Component	EE301	Basics of Electrical & Electronics Engineering	3	1	4	15	35	50	35	15	50	100	45	30	75
	EE301L	Basics of Electrical & Electronics Engineering - Lab													
	CSE301	Basics of Computer with programming in C	3	1	4	15	35	50	35	15	50	100	45	30	75
	CSE301L	Basics of Computer with programming in C													
	OJT302	OJT	0	12	12	-	-	-	245	105	350	350	0	540	540
		Total	1	14	20	30	70	100	315	135	450	550	90	600	690
Grand Total			16	15	31	105	245	350	350	150	500	850	255	630	885

	Semester-3														
Code	Subject Name	Hrs. per course			Credits			Marks							NOS
		Total						Th.			Pr.			Total	
		Th.	Pr.	Total	Th.	Pr.	Total	Int.	Ext.	Total	Int.	Ext.	Total		
GEC															
EDSC-201 EDSC-201P	Engineering Science	45	30	75	3	1	4	15	35	50	35	15	50	100	
EDDE-203 EDDE-203P	Digital Electronics	45	30	75	3	1	4	15	35	50	35	15	50	100	
ZDGE-205	Entrepreneurship Management	60		60	4		4	30	70	100				100	ELE/N9919
	GEC TOTAL	150	60	210	10	2	12	60	140	200	70	30	100	300	
SEC															
EDAE-207 EDAE-207P	Analog Electronics	30	30	60	2	1	3	15	35	50	35	15	50	100	
EDMW-209	Electrical Engineering Materials and Wiring	45		45	3		3	30	70	100				100	IAS/N5609
EOJT-IE-201	NSQF Aligned On Job Training		540	540		12	12				245	105	350	350	
	SEC TOTAL	75	570	645	5	13	18	45	105	150	280	120	400	550	
	Total	225	630	855	15	15	30	105	245	350	350	150	500	850	

Semester-4															
Code	Subject Name	Hrs. per course			Credits			Marks							NOS
		Total						Th.			Pr.			Total	
		Th	Pr.	Total	Th	Pr	Total	Int	Ext	Total	Int	Ext	Total		
GEC															
ZDGE-202	Statistical Process Control	60		60	4		4	30	70	100				100	
EDIM-204 EDAE-204P	Electronics Instruments and Measurements	45	30	75	3	1	4	15	35	50	35	15	50	100	
EDCS-206 EDCS-206P	Control System	30	60	90	2	2	4	15	35	50	35	15	50	100	
	GEC TOTAL	135	90	225	9	3	12	60	140	200	70	30	100	300	
SEC															
EDMS-208	Plant Maintenance and Safety	45		45	3		3	30	70	100				100	IAS/N9002
EDTS-210 EDTS-210P	Transducers and Signal Conditioning	30	30	60	2	1	3	15	35	50	35	15	50	100	
EOJT-IE-202	NSQF Aligned On Job Training		540	540		12	12				245	105	350	350	IAS/N5609 IAS/N9001 IAS/N9002
	SEC TOTAL	75	570	645	5	13	18	45	105	150	280	120	400	550	
	Total	210	660	870	14	16	30	105	245	350	350	150	500	850	

**Job Role (Level 4):**

- i. **Wire Bonding Operator (ELE/Q1702)**
- ii. **Cabling Technician (IAS/Q5603)**

**Brief Job Description (ELE/Q1702):** The individual at work operates the automated or semi-automated wire bonding machine to connect the die or chip to the lead frame or PCB through a micro length metal wire.

**Brief Job Description (IAS/Q5603):** The Cabling Technician is a multi-skilled person who can plan and lay different types of cables and do the termination and interconnection work involved in diverse environments such as process plants, factory automation and building automation projects.

**SEMESTER V**

	Teaching scheme														
Code	Subject Name	Hrs. per course			Credits			Marks							NOS
		Total						Th.			Pr.			Total	
		Th.	Pr.	Total	Th.	Pr.	Total	Int.	Ext.	Total	Int.	Ext.	Total		
GEC															
EDPI-301 EDPI-301P	Principles of Instrumentation	45	30	75	3	1	4	15	35	50	35	15	50	100	
EDQM-303	Quality Management	60		60	4		4	30	70	100				100	
EDPL-305 EDPL-305P	Programmable Logic Controller	45	30	75	3	1	4	15	35	50	35	15	50	100	
	GEC TOTAL	150	60	210	10	2	12	60	140	200	70	30	100	300	
SEC															
EDDC-307 EDDC-307P	Electronic Device Circuits	30	30	60	2	1	3	15	35	50	35	15	50	100	
EDES-309 EDES-309P	Electrical Machines	30	30	60	2	1	3	15	35	50	35	15	50	100	
EOJT-IE-301	NSQF Aligned On Job Training		540	540		12	12				245	105	350	350	
	SEC TOTAL	60	600	660	4	14	18	30	70	100	315	135	450	550	
	Total	210	660	870	14	16	30	90	210	300	385	160	550	850	

## SEMESTER VI

	Teaching scheme															
Code	Subject Name	Hrs. per course			Credits			Marks							NOS	
		Total						Th.			Pr.			Total		
		Th.	Pr.	Total	Th	Pr	Total	Int	Ext	Total	Int	Ext	Total			
GEC																
EDPE-302	Power Electronics	45	30	75	3	1	4	15	35	50	35	15	50	100		
EDMP-304	Microprocessor and Peripheral Devices	60		60	4		4	30	70	100				100		
EDSM-306	Spreadsheet modelling	30	60	90	2	2	4	15	35	50	35	15	50	100		
	GEC TOTAL	135	90	225	9	3	12	60	140	200	70	30	100	300		
SEC																
ZDMP-308	Major Project (Presentation + Viva)		120	120		4	4				100	100	200	200		
EDPM-310	Project Management	30		30	2		2	30	70	100				100		
EOJT-IE-302	NSQF aligned On Job Training		540	540		12	12				245	105	350	350		
	SEC TOTAL	30	660	690	2	16	18	30	70	100	345	205	550	650		
	Total	165	750	915	11	19	30	90	210	300	415	235	650	950		

### Job Role (Level 5):

- i. Sales Executive (ELE/Q5601)
- ii. Product Engineer (ELE/Q4201)

**Brief Job Description(ELE/Q5601):** The individual at work is responsible for studying the market, understanding the customer requirement and offering products and services to satisfy the customer requirement. The individual coordinates with the channel sales partners and interacts directly with customers for sale of products and services.

**Brief Job Description (ELE/Q4201):** The individual at work understands the product requirement, interprets the product design and develops product for manufacturing. The individual acts an interface between design and production department.