









# Junior Engineer Drone (R & D)

QP Code: ELE/Q6703

Version: 1.0

NSQF Level: 5.5

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### **ELE/Q6703: Junior Engineer Drone (R & D)**

#### **Brief Job Description**

Junior Engineer Drone (R& D) conducts research related to all the new technologies in the field of drones & its components & also designs a prototype for the manufacturing of a drone

#### **Personal Attributes**

Junior Engineer Drone conducts research related to all the new technologies in the field of drones & its components & also design a prototype for the manufacturing of a drone

#### **Applicable National Occupational Standards (NOS)**

#### **Compulsory NOS:**

- 1. ELE/N6705: R & D in the field of Drones & its components
- 2. ELE/N6706: Development of Prototype for Manufacturing
- 3. ELE/N7007: Practical Aspect of Drones and Simulation Techniques
- 4. DGT/VSQ/N0102: Employability Skills (60 Hours)

#### **Qualification Pack (QP) Parameters**

Sector	Electronics
Sub-Sector	E-Mobility and Battery
Occupation	Product Design & Development-EM&B
Country	India
NSQF Level	5.5
Credits	18
Aligned to NCO/ISCO/ISIC Code	NCO-2015/8212.0400









Minimum Educational Qualification & Experience	12th grade Pass with 2 Years of experience OR 12th grade pass with 1 year NTC/ NAC with 1 Year of experience OR Completed 3 year diploma after 10th (Electronics/Electrical/Mechanical) with 1 Year of experience OR Certificate-NSQF (level 4) with 3 Years of experience OR Pursuing 3rd year of UG (and 4th B.sc./B.tech/B.E in the relevant Field)
Minimum Level of Education for Training in School	12th Class
Pre-Requisite License or Training	NA
Minimum Job Entry Age	21 Years
Last Reviewed On	NA
Next Review Date	31/01/2027
NSQC Approval Date	31/01/2024
Version	1.0
Reference code on NQR	QG-5.5-EH-01991-2024-VI-ESSC
NQR Version	1.0









# ELE/N6705: R & D in the field of Drones & its components

#### **Description**

A Drone Research & Design Specialist conducts research related to all the new technologies in the field of drones & its components.

#### Scope

The scope covers the following:

- Market Research / Industry Demand
- Pre design requirements

#### **Elements and Performance Criteria**

#### Market Research / Industry Demand

To be competent, the user/individual on the job must be able to:

- **PC1.** Study about the Drone Electronics and communication
- PC2. Study about various segments where Drones are in use
- **PC3.** Study about the background of the Drones & its fraternity
- PC4. Skill Gap Study of the demand for workforce in the Drone Sector
- **PC5.** Use Case Study

#### Pre design requirements

To be competent, the user/individual on the job must be able to:

- **PC6.** Overview of the Drone, various components and its related allied technologies
- PC7. Identification & Study of the Software used for the simulation and data collection
- PC8. Hands on with software & hardware
- **PC9.** Development of the Design requirements

#### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** Organisation policies on incentives and personnel management
- **KU2.** Importance of the individual's role in the workflow
- **KU3.** Reporting structure followed in the organisation
- **KU4.** organisation's portfolio of products
- KU5. organisation policy on product's warranty and other terms and conditions
- **KU6.** Types and applications of various types of electronic components such as resistors, capacitors, coil, diode, transistor, integrated circuits (IC) etc.
- **KU7.** various types of Drones, their respective applications, electronic components and functioning

#### **Generic Skills (GS)**









User/individual on the job needs to know how to:

- **GS1.** write common words/signs and set phrases used in the work
- GS2. Prepare checklists, reports and fill out forms in local language or Hindi/English
- **GS3.** Measure various dimensions as per task requirements
- GS4. Perform arithmetic calculations of addition, subtraction, multiplication and division processes
- **GS5.** Read and interpret information (symbols, dimensions, terminology, dates etc.) given in local language or Hindi









### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Market Research / Industry Demand	25	-	-	25
<b>PC1.</b> Study about the Drone Electronics and communication	5	-	-	5
<b>PC2.</b> Study about various segments where Drones are in use	5	-	-	5
<b>PC3.</b> Study about the background of the Drones & its fraternity	5	-	-	5
<b>PC4.</b> Skill Gap Study of the demand for workforce in the Drone Sector	5	-	-	5
PC5. Use Case Study	5	-	-	5
Pre design requirements	20	-	-	30
PC6. Overview of the Drone, various components and its related allied technologies	5	-	-	7
<b>PC7.</b> Identification & Study of the Software used for the simulation and data collection	5	-	-	7
PC8. Hands on with software & hardware	5	-	-	9
PC9. Development of the Design requirements	5	-	-	7
NOS Total	45	-	-	55









# **National Occupational Standards (NOS) Parameters**

NOS Code	ELE/N6705
NOS Name	R & D in the field of Drones & its components
Sector	Electronics
Sub-Sector	E-Mobility and Battery
Occupation	Product Design & Development-EM&B
NSQF Level	5
Credits	4
Version	1.0
Last Reviewed Date	31/01/2024
Next Review Date	31/01/2027
NSQC Clearance Date	31/01/2024









### **ELE/N6706: Development of Prototype for Manufacturing**

#### **Description**

A Drone Research & Design Specialist works on the designing of a prototype required for the manufacturing of a drone.

#### Scope

The scope covers the following:

- Understanding product features and engineering drawing
- Develop design for manufacture
- Completing approval procedures

#### **Elements and Performance Criteria**

#### Understanding product features and engineering drawing

To be competent, the user/individual on the job must be able to:

- PC1. Understand specifications of product being developed
- **PC2.** Compare specifications of new product with existing and identify differences in terms of features and functionality
- **PC3.** Assess the level of design similarities
- **PC4.** Check if selected components have been used in existing products
- **PC5.** plan man hour requirement and set budget deadlines to develop the required drawing
- **PC6.** Thoroughly understand the design requirement from the research team

#### Develop design for manufacture

To be competent, the user/individual on the job must be able to:

- **PC7.** Collect information on drone & its components for the prototype
- **PC8.** If a component of an existing model is being altered, make changes in the manufacture design drawing
- **PC9.** Get approval of the drawing developed from the design development team
- **PC10.** Apply approved engineering concepts, processes and principles in developing the drawing, drone navigation and various controls
- **PC11.** Ensure compliance with regulations, standards and codes of practices
- **PC12.** Ensure the drawing related to the aerodynamics and its payload complying with manufacturing requirements and capabilities of the organisation

#### Completing approval procedures

To be competent, the user/individual on the job must be able to:

- **PC13.** After the drawing has been reviewed by the design development team, get the drawing approved by Lead
- PC14. Ensure accuracy of design developed and maintain consistency with the engineering drawing

#### **Knowledge and Understanding (KU)**









The individual on the job needs to know and understand:

- **KU1.** Functionalities of various components of Drone such as fans, propellers, electric motors, camera system, GPS, etc.
- **KU2.** Standard work practices for designing of the drone.
- **KU3.** Various tests and their procedures for checking the Drones
- KU4. Usage of various tools for assembling the Drone such as multi meter, soldering gun etc.
- **KU5.** Techniques for fitting and fixing of drone components
- **KU6.** documentation performed during the entire process
- **KU7.** Necessary product information to be communicated to the customer while commissioning the drone
- **KU8.** Applicable safety and quality standards during the entire process









### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Understanding product features and engineering drawing	8	12	6	5
<b>PC1.</b> Understand specifications of product being developed	2	3	-	1
<b>PC2.</b> Compare specifications of new product with existing and identify differences in terms of features and functionality	1	2	-	1
PC3. Assess the level of design similarities	1	2	2	1
<b>PC4.</b> Check if selected components have been used in existing products	1	2	2	1
<b>PC5.</b> plan man hour requirement and set budget deadlines to develop the required drawing	1	1	-	-
<b>PC6.</b> Thoroughly understand the design requirement from the research team	2	2	2	1
Develop design for manufacture	12	18	6	-
<b>PC7.</b> Collect information on drone & its components for the prototype	2	3	-	-
<b>PC8.</b> If a component of an existing model is being altered, make changes in the manufacture design drawing	2	3	2	-
<b>PC9.</b> Get approval of the drawing developed from the design development team	2	3	2	-
<b>PC10.</b> Apply approved engineering concepts, processes and principles in developing the drawing, drone navigation and various controls	2	3	-	-
<b>PC11.</b> Ensure compliance with regulations, standards and codes of practices	2	3	2	-
<b>PC12.</b> Ensure the drawing related to the aerodynamics and its payload complying with manufacturing requirements and capabilities of the organisation	2	3	-	-
Completing approval procedures	10	20	3	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC13.</b> After the drawing has been reviewed by the design development team, get the drawing approved by Lead	5	10	1	-
<b>PC14.</b> Ensure accuracy of design developed and maintain consistency with the engineering drawing	5	10	2	-
NOS Total	30	50	15	5









# **National Occupational Standards (NOS) Parameters**

NOS Code	ELE/N6706
NOS Name	Development of Prototype for Manufacturing
Sector	Electronics
Sub-Sector	E-Mobility and Battery
Occupation	Product Design & Development-EM&B
NSQF Level	5
Credits	8
Version	1.0
<b>Last Reviewed Date</b>	31/01/2024
Next Review Date	31/01/2027
NSQC Clearance Date	31/01/2024









### **ELE/N7007: Practical Aspect of Drones and Simulation Techniques**

#### **Description**

Understanding of Drone Simulation and its techniques

#### Scope

The scope covers the following:

- Simulation setup for multiple Drones.
- How to Use Simulation Setup Effectively.
- Different techniques for usage of simulation setup

#### **Elements and Performance Criteria**

#### Practical Aspect of Drones and Simulation Techniques

To be competent, the user/individual on the job must be able to:

- **PC1.** Understanding of Simulation Setup and its importance for the Drone Operator.
- **PC2.** Different Types of Drone Simulator and their usage
- **PC3.** Major components required for a Drone Simulator
- **PC4.** Setting up of Drone Simulator from scratch
- PC5. How to switch between different models and modes in a Drone Simulator
- **PC6.** Preflight check and starting up your Drone
- PC7. Preparation Cum Coordination for Flight
- PC8. Take off and Flight Stage
- **PC9.** Approach and Landing of a Drone Systems
- PC10. After Flight Checks
- PC11. Simulator Exercises

#### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- **KU1.** Organizational policies on incentives and personnel management
- **KU2.** importance of the individuals role in the workflow
- **KU3.** reporting structure followed in the organization
- **KU4.** organization's portfolio of products
- **KU5.** organizational policy on product's warranty and other terms and conditions
- **KU6.** Learn how to integrate simulator software and hardware
- **KU7.** Using Simulator Software for flying practice
- **KU8.** Preflight and Postflight check drone flying
- KU9. Understand various flying maneuvers









- KU10. Learn Multiple Flying scenarios
- **KU11.** Emergency Procedures and abnormal Flying conditions.

#### **Generic Skills (GS)**

User/individual on the job needs to know how to:

- **GS1.** write common words/signs and set phrases used in the work
- **GS2.** prepare checklists, reports and fill out forms in local language or English/ Hindi maintain work related notes and records
- **GS3.** measure various dimensions as per task requirements
- **GS4.** perform arithmetic calculations of addition, subtraction, multiplication and division processes
- **GS5.** read and interpret information (symbols, dimensions, terminology, dates etc.) given language
- **GS6.** read the relevant literature to get the latest updates about the field of work
- **GS7.** communicate politely and professionally
- **GS8.** listen attentively to understand the information being shared
- **GS9.** take quick decisions to deal with work emergencies or accidents
- **GS10.** identify possible disruptions to work and take appropriate preventive measures
- **GS11.** evaluate all possible solutions to a problem to select the best one.









#### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Practical Aspect of Drones and Simulation Techniques	20	50	20	10
<b>PC1.</b> Understanding of Simulation Setup and its importance for the Drone Operator.	4	-	-	-
<b>PC2.</b> Different Types of Drone Simulator and their usage	4	-	-	2
<b>PC3.</b> Major components required for a Drone Simulator	4	-	-	3
<b>PC4.</b> Setting up of Drone Simulator from scratch	4	10	-	3
<b>PC5.</b> How to switch between different models and modes in a Drone Simulator	4	3	-	2
<b>PC6.</b> Preflight check and starting up your Drone	-	3	-	-
PC7. Preparation Cum Coordination for Flight	-	4	-	-
PC8. Take off and Flight Stage	-	5	3	-
<b>PC9.</b> Approach and Landing of a Drone Systems	-	5	3	-
PC10. After Flight Checks	-	5	4	-
PC11. Simulator Exercises	-	15	10	-
NOS Total	20	50	20	10









# **National Occupational Standards (NOS) Parameters**

NOS Code	ELE/N7007
NOS Name	Practical Aspect of Drones and Simulation Techniques
Sector	Electronics
Sub-Sector	E-Mobility and Battery
Occupation	After Sale Support-EM&B
NSQF Level	3
Credits	4
Version	1.0
Last Reviewed Date	31/01/2024
Next Review Date	31/01/2027
NSQC Clearance Date	31/01/2024









### **DGT/VSQ/N0102: Employability Skills (60 Hours)**

#### **Description**

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

#### Scope

The scope covers the following:

- Introduction to Employability Skills
- Constitutional values Citizenship
- Becoming a Professional in the 21st Century
- Basic English Skills
- Career Development & Goal Setting
- Communication Skills
- Diversity & Inclusion
- Financial and Legal Literacy
- Essential Digital Skills
- Entrepreneurship
- Customer Service
- Getting ready for Apprenticeship & Jobs

#### **Elements and Performance Criteria**

#### Introduction to Employability Skills

To be competent, the user/individual on the job must be able to:

- **PC1.** identify employability skills required for jobs in various industries
- PC2. identify and explore learning and employability portals

#### Constitutional values - Citizenship

To be competent, the user/individual on the job must be able to:

- **PC3.** recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.
- **PC4.** follow environmentally sustainable practices

#### Becoming a Professional in the 21st Century

To be competent, the user/individual on the job must be able to:

- **PC5.** recognize the significance of 21st Century Skills for employment
- **PC6.** practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life

#### Basic English Skills

To be competent, the user/individual on the job must be able to:









- **PC7.** use basic English for everyday conversation in different contexts, in person and over the telephone
- **PC8.** read and understand routine information, notes, instructions, mails, letters etc. written in English
- **PC9.** write short messages, notes, letters, e-mails etc. in English

#### Career Development & Goal Setting

To be competent, the user/individual on the job must be able to:

- **PC10.** understand the difference between job and career
- **PC11.** prepare a career development plan with short- and long-term goals, based on aptitude *Communication Skills*

### To be competent, the user/individual on the job must be able to:

- **PC12.** follow verbal and non-verbal communication etiquette and active listening techniques in various settings
- **PC13.** work collaboratively with others in a team

#### **Diversity & Inclusion**

To be competent, the user/individual on the job must be able to:

- PC14. communicate and behave appropriately with all genders and PwD
- PC15. escalate any issues related to sexual harassment at workplace according to POSH Act

### Financial and Legal Literacy

To be competent, the user/individual on the job must be able to:

- **PC16.** select financial institutions, products and services as per requirement
- **PC17.** carry out offline and online financial transactions, safely and securely
- **PC18.** identify common components of salary and compute income, expenses, taxes, investments etc
- **PC19.** identify relevant rights and laws and use legal aids to fight against legal exploitation *Essential Digital Skills*

To be competent, the user/individual on the job must be able to:

- **PC20.** operate digital devices and carry out basic internet operations securely and safely
- PC21. use e- mail and social media platforms and virtual collaboration tools to work effectively
- PC22. use basic features of word processor, spreadsheets, and presentations

#### Entrepreneurship

To be competent, the user/individual on the job must be able to:

- **PC23.** identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research
- **PC24.** develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion
- **PC25.** identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity

#### **Customer Service**

To be competent, the user/individual on the job must be able to:

- **PC26.** identify different types of customers
- PC27. identify and respond to customer requests and needs in a professional manner.









#### **PC28.** follow appropriate hygiene and grooming standards

#### Getting ready for apprenticeship & Jobs

To be competent, the user/individual on the job must be able to:

- PC29. create a professional Curriculum vitae (Résumé)
- **PC30.** search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively
- PC31. apply to identified job openings using offline /online methods as per requirement
- PC32. answer questions politely, with clarity and confidence, during recruitment and selection
- PC33. identify apprenticeship opportunities and register for it as per guidelines and requirements

#### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- KU1. need for employability skills and different learning and employability related portals
- **KU2.** various constitutional and personal values
- **KU3.** different environmentally sustainable practices and their importance
- **KU4.** Twenty first (21st) century skills and their importance
- **KU5.** how to use English language for effective verbal (face to face and telephonic) and written communication in formal and informal set up
- **KU6.** importance of career development and setting long- and short-term goals
- **KU7.** about effective communication
- KU8. POSH Act
- **KU9.** Gender sensitivity and inclusivity
- **KU10.** different types of financial institutes, products, and services
- **KU11.** how to compute income and expenditure
- **KU12.** importance of maintaining safety and security in offline and online financial transactions
- KU13. different legal rights and laws
- **KU14.** different types of digital devices and the procedure to operate them safely and securely
- **KU15.** how to create and operate an e- mail account and use applications such as word processors, spreadsheets etc.
- **KU16.** how to identify business opportunities
- **KU17.** types and needs of customers
- **KU18.** how to apply for a job and prepare for an interview
- **KU19.** apprenticeship scheme and the process of registering on apprenticeship portal

#### **Generic Skills (GS)**

User/individual on the job needs to know how to:

- **GS1.** read and write different types of documents/instructions/correspondence
- GS2. communicate effectively using appropriate language in formal and informal settings









- **GS3.** behave politely and appropriately with all
- **GS4.** how to work in a virtual mode
- **GS5.** perform calculations efficiently
- **GS6.** solve problems effectively
- **GS7.** pay attention to details
- **GS8.** manage time efficiently
- GS9. maintain hygiene and sanitization to avoid infection









#### **Assessment Criteria**

Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Introduction to Employability Skills	1	1	-	-
<b>PC1.</b> identify employability skills required for jobs in various industries	-	-	-	-
<b>PC2.</b> identify and explore learning and employability portals	-	-	-	-
Constitutional values - Citizenship	1	1	-	-
<b>PC3.</b> recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.	-	-	-	-
PC4. follow environmentally sustainable practices	-	-	-	-
Becoming a Professional in the 21st Century	2	4	-	-
<b>PC5.</b> recognize the significance of 21st Century Skills for employment	-	-	-	-
<b>PC6.</b> practice the 21st Century Skills such as Self-Awareness, Behaviour Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life	-	-	-	-
Basic English Skills	2	3	-	-
<b>PC7.</b> use basic English for everyday conversation in different contexts, in person and over the telephone	-	-	-	-
<b>PC8.</b> read and understand routine information, notes, instructions, mails, letters etc. written in English	-	-	-	-
<b>PC9.</b> write short messages, notes, letters, e-mails etc. in English	-	-	-	-
Career Development & Goal Setting	1	2	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
<b>PC10.</b> understand the difference between job and career	-	-	-	-
<b>PC11.</b> prepare a career development plan with short- and long-term goals, based on aptitude	-	-	-	-
Communication Skills	2	2	-	-
PC12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings	-	-	-	-
PC13. work collaboratively with others in a team	-	-	-	-
Diversity & Inclusion	1	2	-	-
<b>PC14.</b> communicate and behave appropriately with all genders and PwD	-	-	-	-
PC15. escalate any issues related to sexual harassment at workplace according to POSH Act	-	-	-	-
Financial and Legal Literacy	2	3	-	-
<b>PC16.</b> select financial institutions, products and services as per requirement	-	-	-	-
<b>PC17.</b> carry out offline and online financial transactions, safely and securely	-	-	-	-
<b>PC18.</b> identify common components of salary and compute income, expenses, taxes, investments etc	-	-	-	-
PC19. identify relevant rights and laws and use legal aids to fight against legal exploitation	-	-	-	-
Essential Digital Skills	3	4	-	-
<b>PC20.</b> operate digital devices and carry out basic internet operations securely and safely	-	-	-	-
<b>PC21.</b> use e- mail and social media platforms and virtual collaboration tools to work effectively	-	-	-	-
<b>PC22.</b> use basic features of word processor, spreadsheets, and presentations	-	-	-	-









Assessment Criteria for Outcomes	Theory Marks	Practical Marks	Project Marks	Viva Marks
Entrepreneurship	2	3	-	-
<b>PC23.</b> identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research	-	-	-	-
<b>PC24.</b> develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion	-	-	-	-
<b>PC25.</b> identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity	-	-	-	-
Customer Service	1	2	-	-
PC26. identify different types of customers	-	-	-	-
<b>PC27.</b> identify and respond to customer requests and needs in a professional manner.	-	-	-	-
<b>PC28.</b> follow appropriate hygiene and grooming standards	-	-	-	-
Getting ready for apprenticeship & Jobs	2	3	-	-
PC29. create a professional Curriculum vitae (Résumé)	-	-	-	-
<b>PC30.</b> search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively	-	-	-	-
<b>PC31.</b> apply to identified job openings using offline /online methods as per requirement	-	-	-	-
<b>PC32.</b> answer questions politely, with clarity and confidence, during recruitment and selection	-	-	-	-
<b>PC33.</b> identify apprenticeship opportunities and register for it as per guidelines and requirements	-	-	-	-
NOS Total	20	30	-	-









### **National Occupational Standards (NOS) Parameters**

NOS Code	DGT/VSQ/N0102
NOS Name	Employability Skills (60 Hours)
Sector	Cross Sectoral
Sub-Sector	Professional Skills
Occupation	Employability
NSQF Level	4
Credits	2
Version	1.0
Last Reviewed Date	31/01/2024
Next Review Date	31/01/2027
NSQC Clearance Date	31/01/2024

### Assessment Guidelines and Assessment Weightage

#### **Assessment Guidelines**

As per the Guide line as Mentioned

Minimum Aggregate Passing % at QP Level: 70

(**Please note**: Every Trainee should score a minimum aggregate passing percentage as specified above, to successfully clear the Qualification Pack assessment.)

#### **Assessment Weightage**

Compulsory NOS









National Occupational Standards	Theory Marks	Practical Marks	Project Marks	Viva Marks	Total Marks	Weightage
ELE/N6705.R & D in the field of Drones & its components	45	-	-	55	100	30
ELE/N6706.Development of Prototype for Manufacturing	30	50	15	5	100	30
ELE/N7007.Practical Aspect of Drones and Simulation Techniques	20	50	20	10	100	20
DGT/VSQ/N0102.Employability Skills (60 Hours)	20	30	-	-	50	20
Total	115	130	35	70	350	100









### **Acronyms**

NOS	National Occupational Standard(s)
NSQF	National Skills Qualifications Framework
QP	Qualifications Pack
TVET	Technical and Vocational Education and Training









# Glossary

Sector	Sector is a conglomeration of different business operations having similar business and interests. It may also be defined as a distinct subset of the economy whose components share similar characteristics and interests.
Sub-sector	Sub-sector is derived from a further breakdown based on the characteristics and interests of its components.
Occupation	Occupation is a set of job roles, which perform similar/ related set of functions in an industry.
Job role	Job role defines a unique set of functions that together form a unique employment opportunity in an organisation.
Occupational Standards (OS)	OS specify the standards of performance an individual must achieve when carrying out a function in the workplace, together with the Knowledge and Understanding (KU) they need to meet that standard consistently. Occupational Standards are applicable both in the Indian and global contexts.
Performance Criteria (PC)	Performance Criteria (PC) are statements that together specify the standard of performance required when carrying out a task.
National Occupational Standards (NOS)	NOS are occupational standards which apply uniquely in the Indian context.
Qualifications Pack (QP)	QP comprises the set of OS, together with the educational, training and other criteria required to perform a job role. A QP is assigned a unique qualifications pack code.
Unit Code	Unit code is a unique identifier for an Occupational Standard, which is denoted by an 'N'
Unit Title	Unit title gives a clear overall statement about what the incumbent should be able to do.
Description	Description gives a short summary of the unit content. This would be helpful to anyone searching on a database to verify that this is the appropriate OS they are looking for.
Scope	Scope is a set of statements specifying the range of variables that an individual may have to deal with in carrying out the function which have a critical impact on quality of performance required.









Knowledge and Understanding (KU)	Knowledge and Understanding (KU) are statements which together specify the technical, generic, professional and organisational specific knowledge that an individual needs in order to perform to the required standard.
Organisational Context	Organisational context includes the way the organisation is structured and how it operates, including the extent of operative knowledge managers have of their relevant areas of responsibility.
Technical Knowledge	Technical knowledge is the specific knowledge needed to accomplish specific designated responsibilities.
Core Skills/ Generic Skills (GS)	Core skills or Generic Skills (GS) are a group of skills that are the key to learning and working in today's world. These skills are typically needed in any work environment in today's world. These skills are typically needed in any work environment. In the context of the OS, these include communication related skills that are applicable to most job roles.
Electives	Electives are NOS/set of NOS that are identified by the sector as contributive to specialization in a job role. There may be multiple electives within a QP for each specialized job role. Trainees must select at least one elective for the successful completion of a QP with Electives.
Options	Options are NOS/set of NOS that are identified by the sector as additional skills. There may be multiple options within a QP. It is not mandatory to select any of the options to complete a QP with Options.