
Model Curriculum

Airfield Ground Lighting (AGL) Technician

SECTOR: AEROSPACE AND AVIATION
SUB-SECTOR: AIRPORT OPERATIONS, CARGO AND GROUND HANDLING
OCCUPATION: ENGINEERING AND MAINTENANCE
REF ID: AAS/Q4401, V1.0
NSQF LEVEL: 4




Skill India
शिक्षण मेरु - कुशल मेरु


**Aerospace & Aviation
Sector Skill Council**


N · S · D · C
**National
Skill Development
Corporation**

Certificate

**CURRICULUM COMPLIANCE TO
QUALIFICATION PACK – NATIONAL OCCUPATIONAL STANDARDS**
is hereby issued by the

AEROSPACE & AVIATION SECTOR SKILL COUNCIL (AASCC)

for the

MODEL CURRICULUM

Complying to National Occupational Standards of
Job Role/Qualification Pack : 'Airfield Ground Lighting (AGL) Technician' QP No. 'AAS/Q4401' NSQF level 4'

Date of issuance : 01 September 2017
Valid up to : 31 August 2018
* Valid up to the next review date of the Qualification Pack


(Authorised signatory)
Aerospace & Aviation Sector Skill Council (AASCC)

Airfield Ground Lighting (AGL) Technician

CURRICULUM / SYLLABUS

This program is aimed at training candidates for the job of a “Airfield Ground Lighting (AGL) Technician”, in the “Aerospace & Aviation” Sector/Industry and aims at building the following key competencies amongst the learner

Program Name	Airfield Ground Lighting (AGL) Technician		
Qualification Pack Name & Reference ID.	AAS/Q4401		
Version No.	1.0	Version Update Date	28 - 06 - 2017
Pre-requisites to Training	Diploma in Electrical Engineering		
Training Outcomes	<p>After completing this programme, participants will be able to;</p> <ul style="list-style-type: none"> • Troubleshoot, install, test and maintain airfield ground light systems (AGLS) responsibly. • Install jigs, primary and secondary cables, airfield ground lighting, AGL fixtures, shallow/deep bases, CCR’s distribution panels, substation electrical wiring, ALCMS panel and controls responsibly. • Identify and use basic tools, equipment & materials; Understand of tool box, machinery equipment for its operation. • Use basic communication skills and good inter-personal skills. • Understand electrical systems, diagrams, charts and notes. 		

This course encompasses 2 out of 2 National Occupational Standards (NOS) of “Airfield Ground Lighting (AGL) Technician” Qualification Pack issued by “Aerospace & Aviation Sector Skill Council (AASCC)”.

Sr. No.	Module	Key Learning Outcomes	Equipment Required
1	<p>Follow safety and security procedures Theory Duration (hh:mm) 25:00 Practical Duration (hh:mm) 23:00 Corresponding NOS Code AAS/N0502</p>	<p>Candidates will be able to;</p> <ul style="list-style-type: none"> • comply with the organization’s safety and security policies and procedures • comply with the regulatory guidelines on safe conduct of operations and maintenance of conditions to thwart any acts of unlawful interference • report any identified breaches of safety, and security policies and procedures to the designated person • coordinate with other resources at the workplace (within and outside the organization) to achieve safe and secure environment • identify and mitigate any safety and security hazards like illness, accidents, fires or acts of unlawful interference if it falls within the limits of individual’s authority • report any hazards outside the individual’s authority to the relevant person in line with organizational procedures and regulatory guidelines • follow organization’s emergency procedures for accidents, fires or acts of unlawful interference • identify and recommend opportunities for improving health, safety, and security to the designated person • ensure all health and safety records are updated and procedures well defined 	<p>White/Black board/ Chart paper, Markers/Computer and projector, trainer’s guide, student handbook, Charts regarding health & hygiene, fire-fighting, first aid, chart of prohibited items, chart of parking layout, traffic markings, video content demonstrating safety & security procedures, personal protective equipment (PPE) (consisting of safety jacket, safety goggles, ear plugs, gloves & safety shoes)</p>
2	<p>Perform airfield ground lighting installation, assembly, testing and repair Theory Duration (hh:mm) 77:00 Practical Duration (hh:mm) 115:00 Corresponding NOS Code AAS/N4401</p>	<p>Candidates will be able to;</p> <ul style="list-style-type: none"> • perform installation of jigs and related tools • install primary & secondary cables • install AGL fixtures, shallow/ deep bases • install CCR’s, distribution panels and substation electrical wiring as well as ALCMS panel and control • interpret and explain system diagrams • record progress and report to supervisor • troubleshoot, maintain, operate, and repair all aspects of the Aeronautical Ground Lighting System • demonstrate safety awareness at all times and should work in accordance with health and safety regulations as directives 	<p>White/Black board/ Chart paper, Markers/Computer and projector, trainer’s guide, student handbook,</p>

Sr. No.	Module	Key Learning Outcomes	Equipment Required
	<p>Total Duration</p> <p>Theory Duration (hh:mm) 102:00</p> <p>Practical Duration (hh:mm) 138:00</p>		<p>Unique equipment used;</p> <ul style="list-style-type: none"> • Mock-up runway lighting • Measuring Equipment (Multi-meter, current meter, line tester) • Basic Tools (Hammer, Chisel, screw drivers (set) wire cutter, wire stripper, hacksaw, spanner set, pliers, wrenches) • Power Tools (Hand cutting machine, drilling machine) • Materials/Fixtures (wires, cables, switches, sockets, insulation, conduits, lights,etc)

Grand Total Course Duration: 240 Hours, 0 Minutes

(This syllabus/ curriculum has been approved by Aerospace & Aviation Sector Skill Council)

Trainer Prerequisites for Job role: “Airfield Ground Lighting (AGL) Technician” mapped to Qualification Pack: “AAS/Q4401”

Sl. No.	Area	Details
1	Description	To deliver accredited training service, mapping to the curriculum detailed above, in accordance with the Qualification Pack “AAS/Q4401”.
2	Personal Attributes	Aptitude for conducting training, and pre/ post work to ensure competent, employable candidates at the end of the training. Strong communication skills, interpersonal skills, ability to work as part of a team; a passion for quality and for developing others; well- organised and focused, eager to learn and keep oneself updated with the latest in the mentioned field.
3	Minimum Educational Qualifications	B.E./B.Tech in Electrical Engineering
4a	Domain Certification	Statutory Certificate from Aerospace & Aviation Sector Skill Council (AASSC) for Job Role: “ <u>Airfield Ground Lighting (AGL) Technician</u> ” mapped to QP: “AAS/Q4401”. Minimum accepted score for domain certification will be 80%.
4b	Platform Certification	Recommended that the Trainer is certified for the job role “Trainer” mapped to the Qualification Pack : “MEP/Q 0102”. Minimum accepted percentage as per respective SSC guidelines is 80%.
5	Experience	2-3 years of experience

ANNEXURE : ASSESSMENT CRITERIA

Assessment Criteria	
Job Role	: Airfield Ground Lighting (AGL) Technician
Qualification Pack	: AAS/Q4401
Sector Skill Council	: Aerospace and Aviation Sector Skill Council

Sl. No.	Guidelines for Assessment
1	Criteria for assessment for each Qualification Pack will be created by the Sector Skill Council. Each Performance Criteria (PC) will be assigned marks proportional to its importance in NOS. SSC will also lay down proportion of marks for Theory and Skills Practical for each PC
2	The assessment for the theory part will be based on knowledge bank of questions created by the SSC
3	Individual assessment agencies will create unique question papers for theory part for each candidate at each examination/training centre (as per assessment criteria below)
4	Individual assessment agencies will create unique evaluations for skill practical for every student at each examination/training centre based on this criteria
5	To pass the Qualification Pack, every trainee should score a minimum of 70% in aggregate
6	The marks are allocated PC wise, however, every NOS will carry a weightage in the total marks allocated to the specific QP

Assessment outcomes	Assessment Criteria for outcomes	Marks Allocation			
		Total Marks	Out of	Theory	Skills Practical
1. AAS/N0502 Follow safety and security procedures	PC 1. comply with the organisation's safety and security policies and procedures	100	10	5	5
	PC 2. comply with the regulatory guidelines on safe conduct of operations and maintenance of conditions to thwart any acts of unlawful interference		10	5	5
	PC 3. report any identification breaches of safety, and security policies and procedures to the designated person		10	5	5
	PC 4. coordinate with other resource at the workplace (within and outside the organisation) to achieve safe and secure environment		20	10	10

Assessment outcomes	Assessment Criteria for outcomes	Marks Allocation			
		Total Marks	Out of	Theory	Skills Practical
	PC 5. identify and mitigate any safety and security hazards like illness, accidents, fires or acts of unlawful interference if ti falls within the limit of individual's authority		10	5	5
	PC 6. report any hazards outside the individual's authority to the relevant person in line with organizational procedures and regulatory guidelines		20	10	10
	PC 7. follow organisation's emergency procedures for accidents, fires or acts of unlawful interference		5	2	3
	PC 8. identify and recommend opportunities for improving health, safety, and security to the designated person		10	8	2
	PC 9. ensure all health and safety records are updated and procedures well defined		5	2	3
		Total	100	52	48
2. AAS/N4401 Perform airfield ground lighting installation, assembly, testing and repair	PC 1. perform installation of jigs and related tools	100	10	4	6
	PC 2. install primary & secondary cables		15	6	9
	PC 3. install of AGL fixtures, shallow/ deep bases		15	6	9
	PC 4. install of CCR's, distribution panels and substation electrical wiring as well as ALCMS panel and control		15	6	9
	PC 5. interpret and explain system diagrams		10	4	6
	PC 6. record progress and report to supervisor		10	4	6
	PC 7. troubleshoot, maintain, operate, and repair all aspects of the Aeronautical Ground Lighting System		15	6	9
	PC 8. demonstrate safety awareness at all times and should work in accordance with health and safety regulations as directed		10	4	6



Assessment outcomes	Assessment Criteria for outcomes	Marks Allocation			
		Total Marks	Out of	Theory	Skills Practical
		Total	100	40	60
	Grand Total (Marks)	200	200	92	108
	Percentage Weightage (%)			46	54