# CAD/CAM OPERATOR

### **Assessment Package**

National Vocational Certificate Level 3

Version 1 - Dec 2014















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# CAD/CAM OPERATOR

**Assessment Package** 

National Vocational Certificate Level 3

Version 1 - Dec 2014





ASSESSMENT MATERIAL		
EVIDENCE GUIDE		
Qualification		MANAGE SYSTEMS
CAD/CAM Operator CS Code:		
Level: 3		
Credit: 6		
Version: 1		
CONTENTS	1. Assessment Summary and Re	ecord
	<ol> <li>Candidate Assessment</li> <li>Assessor Judgment Guide</li> </ol>	
	-	ent, material and context of assessment
ASSESSMENT AND ASSESSOR	Competent	Not Yet Competent
DETAILS	Assessment	Re-Assessment
	Assessor's Name	Assessor's Code
	Assessor's Signature	Date Date DD MM YYYY
CANDIDATE DETAILS	Candidate's Name	First Name Last Name
	Father's Name	
	Institute Name and District	
	CNIC/BFORM #	
	Registration Number issued by Assessment Body	
	Gender	Male Female Transgender
	Candidate's Consent	I agree to the time and date of the assessment and am aware of the requirements
	Candidate's Signature	of the assessment. I fully understand my rights of appeal.
ASSESSMENT RESULTS SUMMARY FORM	You can use this coversheet as an	Assessment Results Summary Form. Simply post a photocopy of this completed coversheet to NAVTTC
NAVTTC OFFICE ONLY	1. DATE FORM RECEIVED: DD MM	2. DATE ENTERED INTO DATABASE: DD MM YYYY

ACTIVITY	METHOD			DESIRED OUTCOMES	RES	ULT	
NATURE OF ACTIVITY	WRITTEN	ORAL	PORTFOLIO	OBSERVATION	DESIRED OUTCOMES FOR SUCCESSFUL ASSESSMENT OF COMPETENCY STANDARD: MANAGE SYSTEM	COMPETENT	NOT YET COMPETENT
Practical Skill Demonstration				~	<ul> <li>Establish user environment by creating work order storage area from the Tech Pack</li> <li>Save data to work order storage area and set lay limits</li> </ul>		
Knowledge Assessment	~	~			<ul> <li>Answer all questions your Assessor may have during the practical assessment.</li> </ul>		
Other Requirements			~		• N/A		

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### **CANDIDATE ASSESSMENT**

Candidate's Name......Father's Name

#### ALL WORK ASSESSED IN THIS COMPETENCY STANDARD MUST BE YOUR OWN WORK.

#### **GUIDANCE TO CANDIDATE**

To meet this standard you are required to complete the following tasks within **01 hour** timeframe:

- Establish user environment by creating work order storage area from the Tech Pack •
- Save data to work order storage area and set lay limits •

ACTIVITIES	CANDIDATE RESPONSE
1. Complete practical task of "Manage Systems" under observation by an assessor	<ul> <li>During a practical assessment, under observation by an assessor, I will correctly :</li> <li>Establish user environment by creating work order storage area from the Tech Pack</li> <li>Create work order storage area by using CAD/CAM Explorer according to the details given in the Tech Pack</li> <li>Enter work order details in the work order storage area and save the data in the hard drive of the system</li> <li>Select user environment from CAD/CAM Explorer as per work order details given in the Tech Pack</li> <li>Choose metric or imperial measurement system given in the specification sheet of the Tech Pack</li> <li>Save the selected user environment in the hard drive of the system</li> <li>Create marker annotations according to the pattern type and model provided in the Tech Pack</li> <li>Stamp marker to identify work order and its pattern requirements using software codes</li> <li>Save data to work order storage area and set lay limits</li> <li>Set parameters of notches (depth and width) as mentioned in the Tech Pack</li> <li>Select and apply type of notches on the provided pattern of the Tech Pack</li> <li>Select and apply size of notches on the provided pattern of the Tech Pack</li> <li>Gentify the limits of piece placement on fabric ply given in the Tech Pack</li> <li>Perform setting of lay limits on the fabric ply given in the Tech Pack</li> <li>Mentify the limits of piece placement on fabric ply given in the Tech Pack</li> <li>Save data in the work order storage area of the hard drive of the system</li> </ul>
2.Other requirements 3. Answer any questions your assessor may	N/A My answers to questions are correct and demonstrate my understanding of the topics and their application.
have during the practical assessment	

### ASSESSOR JUDGEMENT GUIDE

Candidate's Name .	Father's Name
INSTRUCTIONS FOR ASSESSOR	This section contains minimum evidence requirements. Oral questioning may be used to clarify candidate understanding of the topic and its application.

ACTIVITIES	MINIMUM EVIDENCE REQUIRED	YES	NO	ASSESSOR COMMENTS
Complete practical task of [Manage Systems] under observation by an assessor	During a practical assessment, under observation by an assessor, the candidate correctly carried out the following tasks:			
1. Establish user environment by	Created work order storage area by using CAD/CAM Explorer according to the details given in the Tech Pack			
creating work order storage area from the	Entered work order details in the work order storage area and saved the data in the hard drive of the system			
Tech Pack	Selected user environment from CAD/CAM Explorer as per work order details given in the Tech Pack			
	Chose metric or imperial measurement system given in the specification sheet of the Tech Pack			
	Saved the selected user environment in the hard drive of the system			_
	Created marker annotations according to the pattern type and model provided in the Tech Pack			
	Stamped marker to identify work order and its pattern requirements using software codes			
2. Save data to work order storage area	Set parameters of notches (depth and width) as mentioned in the Tech Pack			
and set lay limits	Selected and applied type of notches on the provided pattern of the Tech Pack			
	Selected and applied size of notches on the provided pattern of the Tech Pack			_
	Identified fabric ply as single, double or tubular as per details given in the Tech Pack			
	Performed setting of lay limits on the fabric ply given in the Tech Pack			
	Identified the limits of piece placement on fabric ply given in the Tech Pack for setting flip or rotate parameter			
	Saved data in the work order storage area of the hard drive of the system			

3. Answer any questions the	Candidate's answers to questions are correct and demonstrate understanding of the topics and their application.		
assessor may have during the practical assessment	Assessor to document below all questions asked and candidate answers. Use extra sheets if required and attach.		

INSTRUCTIONS	This section contains information regarding;
	Context of the assessment
	List of required tools and equipment.
	List of consumable items required during the service
1. Context of Assessment	This task will be performed in <b>real time/simulated</b> environment.

2. Lis	2. List of tools and equipment required(for five candidates)					
S. No	Items	Quantity				
1	Computer system	05				
2	Whiteboard	01				
3	Multimedia	01				
4	Tech Pack (to be installed on each computer)	05				
5	CAD/CAM Software installed on each computer system	05				

3. Lis	3. List of consumable items required(for five candidates)				
S. No	Items	Quantity			
1		0			
2		0			
3		0			





ASSESSMENT MATERIAL		
EVIDENCE GUIDE		
Qualification CAD/CAM Operator CS Code: Level: 3 Credit: 20 Version: 1		DIGITIZE PATTERNS
CONTENTS	<ol> <li>Assessment Summary and R</li> <li>Candidate Assessment</li> </ol>	ecord
	<ol> <li>Assessor Judgment Guide</li> <li>List of required tools/equipm</li> </ol>	ent, material and context of assessment
ASSESSMENT AND ASSESSOR	Competent	Not Yet Competent
DETAILS	Assessment	Re-Assessment
	Assessor's Name	Assessor's Code
	Assessor's Signature	Date DD MM YYYY
CANDIDATE DETAILS	Candidate's Name	First Name Last Name
	Father's Name	
	Institute Name and District	
	CNIC/BFORM #	
	Registration Number issued by Assessment Body	
	Gender Candidate's Consent	Male Female Transgender
	Candidate's Signature	I agree to the time and date of the assessment and am aware of the requirements of the assessment. I fully understand my rights of appeal.
ASSESSMENT RESULTS SUMMARY FORM	You can use this coversheet as an	Assessment Results Summary Form. Simply post a photocopy of this completed coversheet to <b>NAVTTC</b>
NAVTTC OFFICE ONLY	1. DATE FORM RECEIVED: DD MM	2. DATE ENTERED INTO DATABASE: DD MM YYYY

ACTIVITY	METHOD			DESIRED OUTCOMES	RES	ULT	
NATURE OF ACTIVITY	WRITTEN	ORAL	PORTFOLIO	OBSERVATION	DESIRED OUTCOMES FOR SUCCESSFUL ASSESSMENT OF COMPETENCY STANDARD: DIGITIZE PATTERNS	COMPETENT	NOT YET COMPETENT
Practical Skill Demonstration				~	• Digitise the pattern provided in the Tech Pack.		
Knowledge Assessment	~	✓			<ul> <li>Answer all questions your Assessor may have during the practical assessment.</li> </ul>		
Other Requirements			~		• N.A		

### **CANDIDATE ASSESSMENT**

Candidate's Name......Father's Name .....

#### ALL WORK ASSESSED IN THIS COMPETENCY STANDARD MUST BE YOUR OWN WORK.

#### **GUIDANCE TO CANDIDATE**

To meet this standard you are required to complete the following tasks within **1 Hour** timeframe:

Digitise the pattern provided in the Tech Pack ٠

ACTIVITIES	CANDIDATE RESPONSE
<ol> <li>Complete practical task of digitizing patterns under observation of an assessor</li> <li>Other Requirements</li> </ol>	<ul> <li>During a practical assessment, under observation by an assessor, I will correctly :</li> <li>Digitise the pattern provided in the Tech Pack <ul> <li>Turn on the digitizer equipment &amp; check whether the digitizer components such as digitizer cursor, digitizer table, digitizer function keys and menu bars are working.</li> <li>Ensure visually that the provided pattern is not creased before placing it on the digitizer.</li> <li>Make sure the provided pattern is placed in the scanning area on the digitizer and scan the provided pattern.</li> <li>Mark all points of the scanned pattern by marking edges and centre points on the digitizer by using icons with the help of digitizer cursor.</li> <li>Save the digitize pattern in the hard drive of the system.</li> </ul> </li> </ul>
3. Answer any questions your assessor may have during the practical assessment	My answers to questions are correct and demonstrate my understanding of the topics and their application.

### ASSESSOR JUDGEMENT GUIDE

Candidate's Name ......Father's Name.....

INSTRUCTIONS FOR ASSESSOR	This section contains minimum evidence requirements. Oral questioning may be used to clarify candidate understanding of the topic and its application.
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ACTIVITIES	MINIMUM EVIDENCE REQUIRED	YES	NO	ASSESSOR COMMENTS
1. Complete practical task of Digitize Patterns under observation by an assessor	During a practical assessment, under observation by an assessor, the candidate correctly carried out the following tasks:			
1. Digitise the pattern provided in the Tech Pack	Turned on the digitizer equipment & checked whether the digitizer components such as digitizer cursor, digitizer table, digitizer function keys and menu bars are working. Ensured visually that the provided pattern is not creased before placing it on the digitizer. Made sure that the provided pattern is placed in the scanning area on the digitizer and scan the provided pattern. Marked all points of the scanned pattern by marking edges and centre points on the digitizer by using icons with the help of digitizer cursor.			
	Saved the digitize pattern in the hard drive of the system.			
2. Other requirements	[All other requirements related to the Assessment]			

3. Answer any questions the	Candidate's answers to questions are correct and demonstrate understanding of the topics and their application.		
assessor may have during the practical assessment	Assessor to document below all questions asked and candidate answers. Use extra sheets if required and attach.		

	This section contains information regarding;
INSTRUCTIONS	<ul> <li>Context of the assessment</li> <li>List of required tools and equipment.</li> </ul>
	List of consumable items required during the service
1. Context of Assessment	This task will be performed in <b>real time/simulated</b> environment.

2. Lis	t of tools and equipment required(for five candidates)	
S. No	Items	Quantity
1	Computer	5
2	White board	1
3	Multimedia	1
4	Digitizer	5
5	Digitizer Cursor	5
6	Pattern	5
7	CAD/CAM Software	5

3. Lis	3. List of consumable items required(for five candidates)				
S. No	Items	Quantity			
1	Paper	5			
2		0			
3		0			





ASSESSMENT MATERIAL					
EVIDENCE GUIDE					
Qualification CAD/CAM Operator		GRADE PATTERNS			
CS Code:					
Level: 3					
Credit: 20					
Version: 1					
CONTENTS	1. Assessment Summary and R	ecord			
	<ol> <li>Candidate Assessment</li> <li>Assessor Judgment Guide</li> </ol>				
	-	ent, material and context of assessment			
ASSESSMENT AND ASSESSOR	Competent	Not Yet Competent			
DETAILS	Assessment	Re-Assessment			
	Assessor's Name	Assessor's Code			
	Assessor's Signature	Date Date DD MM YYYY			
CANDIDATE DETAILS	Candidate's Name	First Name Last Name			
	Father's Name				
	Institute Name and District				
	CNIC/BFORM #				
	Registration Number issued by Assessment Body				
	Gender	Male - Female - Transgender			
	Candidate's Consent	I agree to the time and date of the assessment and am aware of the requirements			
	Candidate's Signature	of the assessment. I fully understand my rights of appeal.			
ASSESSMENT RESULTS SUMMARY FORM	You can use this coversheet as an	Assessment Results Summary Form. Simply post a photocopy of this completed coversheet to <b>NAVTTC</b>			
NAVTTC OFFICE ONLY	1. DATE FORM RECEIVED: DD MM	2. DATE ENTERED INTO DATABASE: DD MM YYYY			

ACTIVITY	METHOD			Y METHOD DESIRED OUTCOMES			RESULT	
NATURE OF ACTIVITY	WRITTEN	ORAL	PORTFOLIO	OBSERVATION	DESIRED OUTCOMES FOR SUCCESSFUL ASSESSMENT OF COMPETENCY STANDARD: GRADE PATTERNS		NOT YET COMPETENT	
Practical Skill Demonstration				~	<ul> <li>Grade up or grade down the pattern provided in the Tech Pack.</li> </ul>			
Knowledge Assessment	~	✓			<ul> <li>Answer all questions your Assessor may have during the practical assessment.</li> </ul>			
Other Requirements			~		• N.A			

### **CANDIDATE ASSESSMENT**

Candidate's Name......Father's Name

#### ALL WORK ASSESSED IN THIS COMPETENCY STANDARD MUST BE YOUR OWN WORK.

#### **GUIDANCE TO CANDIDATE**

To meet this standard you are required to complete the following tasks within **one(1) hour** timeframe:

- Create and apply rule table for grading up or grading down the pattern according to the Tech Pack. •
- Prepare model for marking of the complete garment. •

ACTIVITIES	CANDIDATE RESPONSE
1. Complete practical task of grading patterns under observation of an assessor	<ul> <li>During a practical assessment, under observation by an assessor, I will correctly :</li> <li>Create and apply rule table for grading up or grading down the pattern according to the Tech Pack.</li> <li>Set user environment for creating rule table by reading and interpreting the size charts given in the Tech Pack</li> <li>Enter all dimensions into the rule table for sizes according to the Tech Pack</li> <li>Finalize rule table by entering values of x &amp; y axes according to the Tech Pack</li> <li>Select required digitized pattern piece for grading according to the Tech Pack</li> <li>Select required digitized pattern piece for grading according to the Tech Pack</li> <li>Apply the rule table to display grading using the Function key in the CAD/CAM software</li> <li>Use the command of "Show Nest All" from the menu bar to display graded piece</li> <li>Verify applied grading and adjust grading as required according to the Tech Pack</li> <li>Use "Export Rules" command to check that all rules have been applied to the all parts of graded pattern according to the Tech Pack</li> <li>Save graded pattern in the hard drive of the system</li> <li>Prepare model for marking of the complete garment.</li> <li>Check all pattern pieces required for the Check for marker making</li> <li>Select quantity of garment parts from the Tech Pack for marker making</li> <li>Select tabric lay type according to the Tech Pack</li> <li>Use Menu bar commands to place pattern pieces on fabric according to the Tech Pack</li> <li>Select model, size breakdown and quantities of marker(s) needed to process the work order given in the Tech Pack for marker(s) by using "Save and Process" command to designated work order storage area in hard drive of the system</li> </ul>
2. Other requirement s	N.A
3. Answer any questions your assessor may have during the practical assessment	My answers to questions are correct and demonstrate my understanding of the topics and their application.

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### ASSESSOR JUDGEMENT GUIDE

ACTIVITIES	MINIMUM EVIDENCE REQUIRED	YES	NO	ASSESSOR COMMENTS
1. Complete practical task of grading patterns under observation of an assessor	During a practical assessment, under observation by an assessor, the candidate correctly carried out the following tasks:			
Create and apply rule table for grading up	Set user environment for creating rule table by reading and interpreting the size charts given in the Tech Pack			
or grading down the pattern according to	Entered all dimensions into the rule table for sizes according to the Tech Pack			
the Tech Pack	Finalized rule table by entering values of x & y axes according to the Tech Pack			
	Selected required digitized pattern piece for grading according to the Tech Pack			
	Applied the rule table to display grading using the Function key in the CAD/CAM software			
	Used the command of "Show Nest All" from the menu bar to display graded piece			
	Verified applied grading and adjust grading as required according to the Tech Pack			
	Used "Export Rules" command to check that all rules have been applied to the all parts of graded pattern according to the Tech Pack			
	Saved graded pattern in the hard drive of the system			
Prepare model for marking of the	Checked all pattern pieces required for the complete garment according to the styling given in the Tech Pack			
complete garment	Selected quantity of garment parts from the Tech Pack for marker making			
	Selected fabric lay type according to the Tech Pack			
	Used Menu bar commands to place pattern pieces on fabric according to the Tech Pack			
	Inserted fabric type, piece, quantity, and add piece if required to complete the model for garment			
	Collected the data from the Tech Pack to process the marker			
	Selected model, size breakdown and quantities of marker(s) needed to process the work order given in the Tech Pack			
	Completed the work order given in the Tech Pack for marker(s) by using "Save and Process" command to designated work order storage area in hard drive of the system			
Grade Patterns	© NAVTTCMarch2016			Page 4 of 7

2. Other	N/A		
requirements			

3. Answer any questions the	Candidate's answers to questions are correct and demonstrate understanding of the topics and their application.		
assessor may have during the practical assessment	Assessor to document below all questions asked and candidate answers. Use extra sheets if required and attach.		

INSTRUCTIONS	This section contains information regarding;
	Context of the assessment
	List of required tools and equipment.
	List of consumable items required during the service
1. Context of Assessment	This task will be performed in <b>real time/simulated</b> environment.

2. Lis	2. List of tools and equipment required(for five candidates)		
S. No	Items	Quantity	
1	Computer Systems	5	
2	White Board	1	
3	Multimedia	1	
4	Tech Pack	5	
5	CAD/CAM software	5	

3. Lis	3. List of consumable items required(for five candidates)	
S. No	Items	Quantity
1		0
2		0
3		0





ASSESSMENT MATERIAL		
EVIDENCE GUIDE		
Qualification CAD/CAM Operator CS Code: Level: 3	CRI	EATE MARKER MAKING
Credit: 24 Version: 1		
CONTENTS	<ol> <li>Assessment Summary and Re</li> <li>Candidate Assessment</li> <li>Assessor Judgment Guide</li> <li>List of required tools/equipm</li> </ol>	ecord ent, material and context of assessment
ASSESSMENT AND ASSESSOR	Competent	Not Yet Competent
DETAILS	Assessment	Re-Assessment
	Assessor's Name	Assessor's Code
	Assessor's Signature	Date DD MM YYYY
CANDIDATE DETAILS	Candidate's Name	First Name Last Name
	Father's Name	
	Institute Name and District	
	CNIC/BFORM # Registration Number issued by Assessment Body	
	Gender	Male Female Transgender
	Candidate's Consent Candidate's Signature	I agree to the time and date of the assessment and am aware of the requirements of the assessment. I fully understand my rights of appeal.
ASSESSMENT RESULTS SUMMARY FORM		Assessment Results Summary Form. Simply post a photocopy of this completed coversheet to <b>NAVTTC</b>
NAVTTC OFFICE ONLY	1. DATE FORM RECEIVED: DD MM	2. DATE ENTERED INTO DATABASE: DD MM YYYY

ACTIVITY	METHOD			METHOD DESIRED OUTCOMES			RESULT	
NATURE OF ACTIVITY	WRITTEN	ORAL	PORTFOLIO	OBSERVATION	DESIRED OUTCOMES FOR SUCCESSFUL ASSESSMENT OF COMPETENCY STANDARD: CREATE MARKER MAKING	COMPETENT	NOT YET COMPETENT	
Practical Skill Demonstration				~	Create marker using CAD/CAM software			
Knowledge Assessment	~	~			<ul> <li>Answer all questions your Assessor may have during the practical assessment.</li> </ul>			
Other Requirements			~		• N.A			

### CAD/CAM OPERATOR (APPAREL/TEXTILE)

Candidate's Name

#### ALL WORK ASSESSED IN THIS COMPETENCY STANDARD MUST BE YOUR OWN WORK.

#### **GUIDANCE TO CANDIDATE**

To meet this standard you are required to complete the following tasks within **One hour** timeframe:

Create marker using CAD/CAM software ٠

ACTIVITIES	CANDIDATE RESPONSE
1. Complete practical task of Create Marker Making under observation of an assessor	<ul> <li>During a practical assessment, under observation by an assessor, I will correctly :</li> <li>Create marker using CAD/CAM software         <ul> <li>Select order name from CAD/CAM Explorer drop down menu for marking</li> <li>Drag and drop pieces to marker space from the model display on computer screen</li> <li>Adjust pieces of graded pattern to achieve optimal usage of fabric to minimize fabric wastage</li> <li>Verify number of pieces according to the required garment size and quantities as given in the Tech Pack</li> <li>Save marker to the designated work order storage area in the hard drive of the system</li> <li>Check whether the plotter/automatic cutting machine is attached to the CAD/CAM system</li> <li>Check whether the paper width in plotter matches the fabric width according to the Tech Pack</li> <li>Use "Plot" command to send complete marker to the plotter/automatic cutting machine for the cutting of garment</li> </ul> </li> </ul>
2. Other requirement s	N.A
3. Answer any questions your assessor may have during the practical assessment	My answers to questions are correct and demonstrate my understanding of the topics and their application.

### ASSESSOR JUDGEMENT GUIDE

## Candidate's Name ......Father's Name......Father's Name.....

#### INSTRUCTIONS FOR ASSESSOR

This section contains minimum evidence requirements. Oral questioning may be used to clarify candidate understanding of the topic and its application.

ACTIVITIES	MINIMUM EVIDENCE REQUIRED	YES	NO	ASSESSOR COMMENTS
1. Complete practical task of Create Marker Making under observation by an assessor	During a practical assessment, under observation by an assessor, the candidate correctly carried out the following tasks:			
1.Create marker using CAD/CAM	Selected order name from CAD/CAM Explorer drop down menu for marking			
software	Dragged and dropped pieces to marker space from the model display on computer screen			
	Adjusted pieces of graded pattern to achieve optimal usage of fabric to minimize fabric wastage			
	Verified number of pieces according to the required garment size and quantities as given in the Tech Pack			
	Saved marker to the designated work order storage area in the hard drive of the system			
	Checked whether the plotter/automatic cutting machine is attached to the CAD/CAM system			
	Checked whether the paper width in plotter matches the fabric width according to the Tech Pack			
	Used "Plot" command to send complete marker to the plotter/automatic cutting machine for the cutting of garment			
2. Other requirements	N/A			

3. Answer any questions the	Candidate's answers to questions are correct and demonstrate understanding of the topics and their application.		]
assessor may have during the practical assessment	Assessor to document below all questions asked and candidate answers. Use extra sheets if required and attach.		

	This section contains information regarding;
INSTRUCTIONS	<ul> <li>Context of the assessment</li> <li>List of required tools and equipment.</li> </ul>
	List of consumable items required during the service
1. Context of Assessment	This task will be performed in <b>real time/simulated</b> environment.

2. Lis	2. List of tools and equipment required(for five candidates)		
S. No	Items	Quantity	
1	Computer	5	
2	Plotter	1	
3	Whiteboard	1	
4	Multimedia Projector	1	
5	Tech Pack	5	
6	CAD/CAM Software	5	

3. Lis	3. List of consumable items required(for five candidates)		
S. No	Items	Quantity	
1	Paper Rolls	5	
2	Fabric	5	
3	Whiteboard Markers	1	





ASSESSMENT MATERIAL EVIDENCE GUIDE Qualification CAD/CAM Operator CS Code: Level: 3 Credit: 80 Version: 1	CAD/CAM OPERATOR		
CONTENTS	<ol> <li>Assessment Summary and Record</li> <li>Candidate Assessment</li> </ol>		
	<ol> <li>Assessor Judgment Guide</li> <li>List of required tools/equipment, material and context of assessment</li> </ol>		
ASSESSMENT AND ASSESSOR	Competent Not Yet Competent		
DETAILS	Assessment Re-Assessment		
	Assessor's Name Assessor's Code		
	Assessor's Signature Date DD MM YYYY		
CANDIDATE DETAILS	Candidate's Name		
	Father's Name		
	Registration Number issued by Assessment Body		
	Gender Male Female Transgender		
	Candidate's Consent I agree to the time and date of the assessment and am aware of the requirements of the assessment. I fully understand my rights of appeal.		
ASSESSMENT RESULTS SUMMARY FORM	You can use this coversheet as an Assessment Results Summary Form. Simply post a photocopy of this completed coversheet to NAVTTC		
NAVTTC OFFICE ONLY	1. DATE     2. DATE ENTERED INTO       FORM     D       RECEIVED:     DD       MM     YYYY		

ACTIVITY		MET	HOD		DESIRED OUTCOMES		ULT
NATURE OF ACTIVITY	WRITTEN	ORAL	PORTFOLIO	OBSERVATION	DESIRED OUTCOMES FOR SUCCESSFUL ASSESSMENT OF QUALIFICATION: CAD/CAM OPERATOR		NOT YET COMPETENT
Practical Skill Demonstration				~	<ul> <li>Operate and manage CAD/CAM software to digitise and grade patterns</li> </ul>		
Knowledge Assessment	~	✓			<ul> <li>Answer all questions your Assessor may have during the practical assessment.</li> </ul>		
Other Requirements			~		• N.A		

### **CANDIDATE ASSESSMENT**

Candidate's Name

#### ALL WORK ASSESSED IN THIS COMPETENCY STANDARD MUST BE YOUR OWN WORK.

#### **GUIDANCE TO CANDIDATE**

To meet this standard you are required to complete the following tasks within **four hours** timeframe:

- Establish user environment by creating work order storage area from the Tech Pack •
- Save data to work order storage area and set lay limits .
- Digitise the pattern provided in the Tech Pack
- Create and apply rule table for grading up or grading down the pattern according to the Tech Pack. •
- Prepare model for marking the complete garment.
- Create marker using CAD/CAM software

ACTIVITIES	CANDIDATE RESPONSE
1. Complete practical task	During a practical assessment, under observation by an assessor, I will correctly :
1. Complete practical task of CAD/CAM software under observation of an assessor	<ul> <li>Establish user environment by creating work order storage area from the Tech Pack         <ul> <li>Create work order storage area by using CAD/CAM Explorer according to the details given in the Tech Pack</li> <li>Enter work order details in the work order storage area and save the data in the hard drive of the system</li> <li>Select user environment from CAD/CAM Explorer as per work order details given in the Tech Pack</li> <li>Choose metric or imperial measurement system given in the specification sheet of the Tech Pack</li> <li>Choose metric or imperial measurement system given in the specification sheet of the Tech Pack</li> <li>Save the selected user environment in the hard drive of the system</li> <li>Create marker annotations according to the pattern type and model provided in the Tech Pack</li> <li>Stamp marker to identify work order and its pattern requirements using software codes</li> </ul> </li> <li>Save data to work order storage area and set lay limits</li> <li>Set parameters of notches on the provided pattern of the Tech Pack</li> <li>Select and apply type of notches on the provided pattern of the Tech Pack</li> <li>Select and apply size of notches on the provided pattern of the Tech Pack</li> <li>Select and apply size of notches on the provided pattern of the Tech Pack</li> <li>Identify the limits of piece placement on fabric ply given in the Tech Pack</li> <li>Perform setting of lay limits on the fabric ply given in the Tech Pack for setting flip or rotate parameter</li> <li>Save data in the work order storage area of the hard drive of the system</li> </ul> <li>Digitise the pattern provided pattern is not creased before placing it on the digitizer.</li> <li>Make sure the provided pattern is placed in the scanning area on the digitizer and scan the provided pattern.</li>
	<ul> <li>Enter all dimensions into the rule table for sizes according to the Tech Pack</li> </ul>
	<ul> <li>Finalize rule table by entering values of x &amp; y axes according to the Tech Pack</li> <li>Select required digitized pattern piece for grading according to the Tech Pack</li> </ul>
	<ul> <li>Apply the rule table to display grading using the Function key in the CAD/CAM software</li> </ul>
	<ul> <li>Stamp marker to identify work order and its pattern requirements using software codes</li> <li>Save data to work order storage area and set lay limits</li> <li>Set parameters of notches (depth and width) as mentioned in the Tech Pack</li> <li>Select and apply type of notches on the provided pattern of the Tech Pack</li> <li>Select and apply size of notches on the provided pattern of the Tech Pack</li> <li>Select and apply size of notches on the provided pattern of the Tech Pack</li> <li>Select and apply size of notches on the provided pattern of the Tech Pack</li> <li>Select and apply size of notches on the provided pattern of the Tech Pack</li> <li>Identify fabric ply as single, double or tubular as per details given in the Tech Pack</li> <li>Perform setting of lay limits on the fabric ply given in the Tech Pack for setting flip or rot parameter</li> <li>Save data in the work order storage area of the hard drive of the system</li> <li>Digitise the pattern provided in the Tech Pack</li> <li>Turn on the digitizer equipment &amp; check whether the digitizer components such as digitizer cursor, digitizer table, digitizer function keys and menu bars are working.</li> <li>Ensure visually that the provided pattern is not creased before placing it on the digitizer.</li> <li>Make sure the provided pattern is placed in the scanning area on the digitizer and scan the provided pattern.</li> <li>Mark all points of the scanned pattern by marking edges and centre points on the digitizer by using icons with the help of digitizer cursor.</li> <li>Save the digitize pattern in the hard drive of the system.</li> <li>Create and apply rule table for grading up or grading down the pattern according to the Tech Pack.</li> <li>Set user environment for creating rule table by reading and interpreting the size charts given the Tech Pack</li> <li>Enter all dimensions into the rule table for sizes according to the Tech Pack</li> <li>Finalize rule table</li></ul>

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2. Other requirement s	<ul> <li>Verify applied grading and adjust grading as required according to the Tech Pack</li> <li>Use "Export Rules" command to check that all rules have been applied to the all parts of graded pattern according to the Tech Pack</li> <li>Save graded pattern in the hard drive of the system</li> <li>Prepare model for marking of the complete garment.</li> <li>Check all pattern pieces required for the complete garment according to the styling given in the Tech Pack</li> <li>Select quantity of garment parts from the Tech Pack for marker making</li> <li>Select fabric lay type according to the Tech Pack</li> <li>Use Menu bar commands to place pattern pieces on fabric according to the Tech Pack</li> <li>Insert fabric type, piece, quantity, and add piece if required to complete the model for garment</li> <li>Collect the data from the Tech Pack to process the marker</li> <li>Select model, size breakdown and quantities of marker(s) needed to process the work order given in the Tech Pack</li> <li>Complete the work order given in the Tech Pack for marker(s) by using "Save and Process" command to designated work order storage area in hard drive of the system</li> <li>Create marker using CAD/CAM software</li> <li>Select order name from CAD/CAM Explorer drop down menu for marking</li> <li>Drag and drop pieces to marker space from the model display on computer screen</li> <li>Adjust pieces of graded pattern to achieve optimal usage of fabric to minimize fabric wastage</li> <li>Verify number of pieces according to the required garment size and quantities as given in the Tech Pack</li> <li>Save marker to the designated work order storage area in the hard drive of the system</li> <li>Check whether the plotter/automatic cutting machine is attached to the CAD/CAM system</li> <li>Check whether the plotter/automatic cutting machine is attached to the Tech Pack</li> <li>Save marker to the designated work order storage area in the hard drive of the syst</li></ul>
3. Answer any	My answers to questions are correct and demonstrate my understanding of the topics and their application.
questions your assessor may have during the practical assessment	

### ASSESSOR JUDGEMENT GUIDE

Candidate's Name .	Father's Name
INSTRUCTIONS FOR ASSESSOR	This section contains minimum evidence requirements. Oral questioning may be used to clarify candidate understanding of the topic and its application.

ACTIVITIES	MINIMUM EVIDENCE REQUIRED	YES	NO	ASSESSOR COMMENTS
1. Complete practical task of CAD/CAM software under observation of an assessor	During a practical assessment, under observation by an assessor, the candidate correctly carried out the following tasks:			
Establish user environment by creating work order	Created work order storage area by using CAD/CAM Explorer according to the details given in the Tech Pack Entered work order details in the work order storage area and			
storage area from the Tech Pack	saved the data in the hard drive of the system Selected user environment from CAD/CAM Explorer as per work order details given in the Tech Pack			
	Chose metric or imperial measurement system given in the specification sheet of the Tech Pack Saved the selected user environment in the hard drive of the			
	system Created marker annotations according to the pattern type and model provided in the Tech Pack			
Save data to work order storage area and set lay limits	Stamped marker to identify work order and its pattern requirements using software codes			
	Set parameters of notches (depth and width) as mentioned in the Tech Pack Selected and applied type of notches on the provided pattern of the			
	Tech Pack Selected and applied size of notches on the provided pattern of the			
	Tech Pack Identified fabric ply as single, double or tubular as per details given in the Tech Pack			
	Performed setting of lay limits on the fabric ply given in the Tech Pack Identified the limits of piece placement on fabric ply given in the			
	Tech Pack for setting flip or rotate parameter Saved data in the work order storage area of the hard drive of the			
Digitise the pattern provided in the Tech Pack	system Turned on the digitizer equipment & checked whether the digitizer components such as digitizer cursor, digitizer table, digitizer function keys and menu bars are working.			
	Ensured visually that the provided pattern is not creased before placing it on the digitizer. Made sure that the provided pattern is placed in the scanning area			
	on the digitizer and scan the provided pattern. Marked all points of the scanned pattern by marking edges and centre points on the digitizer by using icons with the help of			
	digitizer cursor. Saved the digitize pattern in the hard drive of the system.			
Create and apply rule table for grading up	Set user environment for creating rule table by reading and interpreting the size charts given in the Tech Pack			

ACTIVITIES	MINIMUM EVIDENCE REQUIRED	YES	NO	ASSESSOR
		120		COMMENTS
or grading down the pattern according to	Entered all dimensions into the rule table for sizes according to the Tech Pack			
the Tech Pack	Finalized rule table by entering values of x & y axes according to the Tech Pack			
	Selected required digitized pattern piece for grading according to the Tech Pack			
	Applied the rule table to display grading using the Function key in the CAD/CAM software			
	Used the command of "Show Nest All" from the menu bar to display graded piece			
	Verified applied grading and adjust grading as required according to the Tech Pack			
	Used "Export Rules" command to check that all rules have been applied to the all parts of graded pattern according to the Tech Pack			
	Saved graded pattern in the hard drive of the system			
Prepare model for marking of the	Checked all pattern pieces required for the complete garment according to the styling given in the Tech Pack			
complete garment	Selected quantity of garment parts from the Tech Pack for marker making			
	Selected fabric lay type according to the Tech Pack			
	Used Menu bar commands to place pattern pieces on fabric according to the Tech Pack			-
	Inserted fabric type, piece, quantity, and add piece if required to complete the model for garment			
	Collected the data from the Tech Pack to process the marker			
	Selected model, size breakdown and quantities of marker(s) needed to process the work order given in the Tech Pack			
	Completed the work order given in the Tech Pack for marker(s) by using "Save and Process" command to designated work order storage area in hard drive of the system			
Create marker using CAD/CAM software	Selected order name from CAD/CAM Explorer drop down menu for marking			
	Dragged and dropped pieces to marker space from the model display on computer screen			-
	Adjusted pieces of graded pattern to achieve optimal usage of fabric to minimize fabric wastage			-
	Verified number of pieces according to the required garment size			
	and quantities as given in the Tech Pack Saved marker to the designated work order storage area in the			
	hard drive of the system Checked whether the plotter/automatic cutting machine is attached			
	to the CAD/CAM system Checked whether the paper width in plotter matches the fabric			-
	width according to the Tech Pack Used "Plot" command to send complete marker to the			
	plotter/automatic cutting machine for the cutting of garment			

3. Answer any questions the	Candidate's answers to questions are correct and demonstrate understanding of the topics and their application.		]
assessor may have during the practical assessment	Assessor to document below all questions asked and candidate answers. Use extra sheets if required and attach.		

	This section contains information regarding;
INSTRUCTIONS	<ul> <li>Context of the assessment</li> <li>List of required tools and equipment.</li> </ul>
	List of consumable items required during the service
1. Context of Assessment	This task will be performed in real time/simulated environment.

2. List of tools and equipment required(for five candidates)				
S. No	Items	Quantity		
1	Computer system	05		
2	Whiteboard	01		
3	Multimedia	01		
4	Tech Pack (to be installed on each computer)	05		
5	CAD/CAM Software installed on each computer system	05		
6	Digitizer	05		
7	Digitizer Cursor	05		
8	Pattern	05		
9	Plotter	01		

3. List of consumable items required(for five candidates)				
S. No	S. No Items Quantity			
1	Paper Rolls	05		
2	Fabric	05		

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