

TRAINING REGULATIONS



ANIMATION NC II

**INFORMATION AND COMMUNICATIONS
TECHNOLOGY (ICT) SECTOR**

TECHNICAL EDUCATION AND SKILLS DEVELOPMENT AUTHORITY
East Service Road, South Superhighway, Taguig City, Metro Manila

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ICT SECTOR

ANIMATION

NATIONAL CERTIFICATE LEVEL II

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TRAINING REGULATIONS FOR ANIMATION NC II

Section 1 ANIMATION NC II QUALIFICATIONS

The **ANIMATION NC II** Qualification consists of competencies that a person must achieve to produce cleaned-up and in-betweened drawings in both production and post-production stages.

This Qualification is packaged from the competency map of the Information and Communication Technology (ICT) Industry as shown in Annex A.

The units of competency comprising this qualification include the following:

UNIT CODE	BASIC COMPETENCIES
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5 00 311 1 05	Participate in workplace communication
5 00 311 1 06	Work in team environment
5 00 311 1 07	Practice career professionalism
5 00 311 1 08	Practice occupational health and safety procedures

Code	COMMON COMPETENCIES
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ICT 315 2 02	Apply quality standards
ICT 311 2 03	Operate a personal computer

Code	CORE COMPETENCIES
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ICT313313	Produce cleaned-up & in-betweened drawings
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A person who has achieved this Qualification is competent to be:

- Clean-Up Artist
- In-between Artist/In-betweener
- Clean-Up Art Checker
- In-between Checker

SECTION 2 COMPETENCY STANDARDS

This section gives the details of the contents of the basic, common and core units of competency required in **ANIMATION NC II**.

BASIC COMPETENCIES

UNIT OF COMPETENCY : PARTICIPATE IN WORKPLACE COMMUNICATION

UNIT CODE : 500311105

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required to gather, interpret and convey information in response to workplace requirements.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables
1. Obtain and convey workplace information	1.1 Specific and relevant information is accessed from appropriate sources 1.2 Effective questioning , active listening and speaking skills are used to gather and convey information 1.3 Appropriate medium is used to transfer information and ideas 1.4 Appropriate non- verbal communication is used 1.5 Appropriate lines of communication with supervisors and colleagues are identified and followed 1.6 Defined workplace procedures for the location and storage of information are used 1.7 Personal interaction is carried out clearly and concisely
2. Participate in workplace meetings and discussions	2.1 Team meetings are attended on time 2.2 Own opinions are clearly expressed and those of others are listened to without interruption 2.3 Meeting inputs are consistent with the meeting purpose and established protocols 2.4 Workplace interactions are conducted in a courteous manner 2.5 Questions about simple routine workplace procedures and matters concerning working conditions of employment are asked and responded to 2.6 Meetings outcomes are interpreted and implemented
3. Complete relevant work related documents	3.1 Range of forms relating to conditions of employment are completed accurately and legibly 3.2 Workplace data is recorded on standard workplace forms and documents 3.3 Basic mathematical processes are used for routine calculations 3.4 Errors in recording information on forms/ documents are identified and properly acted upon 3.5 Reporting requirements to supervisor are completed according to organizational guidelines

RANGE OF VARIABLES

VARIABLE	RANGE
1. Appropriate sources	1.1. Team members 1.2. Suppliers 1.3. Trade personnel 1.4. Local government 1.5. Industry bodies
2. Medium	2.1. Memorandum 2.2. Circular 2.3. Notice 2.4. Information discussion 2.5. Follow-up or verbal instructions 2.6. Face to face communication
3. Storage	3.1. Manual filing system 3.2. Computer-based filing system
4. Forms	4.1. Personnel forms, telephone message forms, safety reports
5. Workplace interactions	5.1. Face to face 5.2. Telephone 5.3. Electronic and two way radio 5.4. Written including electronic, memos, instruction and forms, non-verbal including gestures, signals, signs and diagrams
6. Protocols	6.1. Observing meeting 6.2. Compliance with meeting decisions 6.3. Obeying meeting instructions

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1. Prepared written communication following standard format of the organization 1.2. Accessed information using communication equipment 1.3. Made use of relevant terms as an aid to transfer information effectively 1.4. Conveyed information effectively adopting the formal or informal communication
<p>2. Underpinning Knowledge</p>	<ul style="list-style-type: none"> 2.1. Effective communication 2.2. Different modes of communication 2.3. Written communication 2.4. Organizational policies 2.5. Communication procedures and systems 2.6. Technology relevant to the enterprise and the individual's work responsibilities
<p>3. Underpinning Skills</p>	<ul style="list-style-type: none"> 3.1. Follow simple spoken language 3.2. Perform routine workplace duties following simple written notices 3.3. Participate in workplace meetings and discussions 3.4. Complete work related documents 3.5. Estimate, calculate and record routine workplace measures 3.6. Basic mathematical processes of addition, subtraction, division and multiplication 3.7. Ability to relate to people of social range in the workplace 3.8. Gather and provide information in response to workplace Requirements
<p>4. Resource Implications</p>	<ul style="list-style-type: none"> 4.1. Fax machine 4.2. Telephone 4.3. Writing materials 4.4. Internet
<p>5. Methods of Assessment</p>	<ul style="list-style-type: none"> 5.1. Direct Observation 5.2. Oral interview 5.3. Written test
<p>6. Context for Assessment</p>	<ul style="list-style-type: none"> 6.1. Competency may be assessed individually in the actual workplace or through accredited institution

UNIT OF COMPETENCY: WORK IN TEAM ENVIRONMENT

UNIT CODE : 500311106

UNIT DESCRIPTOR : This unit covers the skills, knowledge and attitudes to identify role and responsibility as a member of a team.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables
1. Describe team role and scope	1.1. The <i>role and objective of the team</i> is identified from available <i>sources of information</i> 1.2. Team parameters, reporting relationships and responsibilities are identified from team discussions and appropriate external sources
2. Identify own role and responsibility within team	2.1. Individual role and responsibilities within the team environment are identified 2.2. Roles and responsibility of other team members are identified and recognized 2.3. Reporting relationships within team and external to team are identified
3. Work as a team member	3.1. Effective and appropriate forms of communications used and interactions undertaken with team members who contribute to known team activities and objectives 3.2. Effective and appropriate contributions made to complement team activities and objectives, based on individual skills and competencies and <i>workplace context</i> 3.3. Observed protocols in reporting using standard operating procedures 3.4. Contribute to the development of team work plans based on an understanding of team's role and objectives and individual competencies of the members.

RANGE OF VARIABLES

VARIABLE	RANGE
1. Role and objective of team	1.1. Work activities in a team environment with enterprise or specific sector 1.2. Limited discretion, initiative and judgement maybe demonstrated on the job, either individually or in a team environment
2. Sources of information	2.1. Standard operating and/or other workplace procedures 2.2. Job procedures 2.3. Machine/equipment manufacturer's specifications and instructions 2.4. Organizational or external personnel 2.5. Client/supplier instructions 2.6. Quality standards 2.7. OHS and environmental standards
3. Workplace context	3.1. Work procedures and practices 3.2. Conditions of work environments 3.3. Legislation and industrial agreements 3.4. Standard work practice including the storage, safe handling and disposal of chemicals 3.5. Safety, environmental, housekeeping and quality guidelines

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1. Operated in a team to complete workplace activity 1.2. Worked effectively with others 1.3. Conveyed information in written or oral form 1.4. Selected and used appropriate workplace language 1.5. Followed designated work plan for the job 1.6. Reported outcomes
<p>2. Underpinning Knowledge and Attitude</p>	<ul style="list-style-type: none"> 2.1. Communication process 2.2. Team structure 2.3. Team roles 2.4. Group planning and decision making
<p>3. Underpinning Skills</p>	<ul style="list-style-type: none"> 3.1. Communicate appropriately, consistent with the culture of the workplace
<p>4. Resource Implications</p>	<p>The following resources MUST be provided:</p> <ul style="list-style-type: none"> 4.1. Access to relevant workplace or appropriately simulated environment where assessment can take place 4.2. Materials relevant to the proposed activity or tasks
<p>5. Methods of Assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> 5.1. Observation of the individual member in relation to the work activities of the group 5.2. Observation of simulation and or role play involving the participation of individual member to the attainment of organizational goal 5.3. Case studies and scenarios as a basis for discussion of issues and strategies in teamwork
<p>6. Context for Assessment</p>	<ul style="list-style-type: none"> 6.1. Competency may be assessed in workplace or in a simulated workplace setting 6.2. Assessment shall be observed while task are being undertaken whether individually or in group

UNIT OF COMPETENCY: PRACTICE CAREER PROFESSIONALISM

UNIT CODE : 500311107

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes in promoting career growth and advancement.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables
1. Integrate personal objectives with organizational goals	1.1. Personal growth and work plans are pursued towards improving the qualifications set for the profession 1.2. Intra- and interpersonal relationships are maintained in the course of managing oneself based on performance evaluation 1.3. Commitment to the organization and its goal is demonstrated in the performance of duties
2. Set and meet work priorities	2.1. Competing demands are prioritized to achieve personal, team and organizational goals and objectives. 2.2. Resources are utilized efficiently and effectively to manage work priorities and commitments 2.3. Practices along economic use and maintenance of equipment and facilities are followed as per established procedures
3. Maintain professional growth and development	3.1. Trainings and career opportunities are identified and availed of based on job requirements 3.2. Recognitions are -sought/received and demonstrated as proof of career advancement 3.3. Licenses and/or certifications relevant to job and career are obtained and renewed

RANGE OF VARIABLES

VARIABLE	RANGE
1. Evaluation	1.1 Performance Appraisal 1.2 Psychological Profile 1.3 Aptitude Tests
2. Resources	2.1 Human 2.2 Financial 2.3 Technology 2.3.1 Hardware 2.3.2 Software
3. Trainings and career opportunities	3.1 Participation in training programs 3.1.1 Technical 3.1.2 Supervisory 3.1.3 Managerial 3.1.4 Continuing Education 3.2 Serving as Resource Persons in conferences and workshops
4. Recognitions	4.1 Recommendations 4.2 Citations 4.3 Certificate of Appreciations 4.4 Commendations 4.5 Awards 4.6 Tangible and Intangible Rewards
5. Licenses and/or certifications	5.1 National Certificates 5.2 Certificate of Competency 5.3 Support Level Licenses 5.4 Professional Licenses

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Attained job targets within key result areas (KRAs) 1.2 Maintained intra - and interpersonal relationship in the course of managing oneself based on performance evaluation 1.3 Completed trainings and career opportunities which are based on the requirements of the industries 1.4 Acquired and maintained licenses and/or certifications according to the requirement of the qualification
<p>2. Underpinning Knowledge</p>	<ul style="list-style-type: none"> 2.1 Work values and ethics (Code of Conduct, Code of Ethics, etc.) 2.2 Company policies 2.3 Company-operations, procedures and standards 2.4 Fundamental rights at work including gender sensitivity 2.5 Personal hygiene practices
<p>3. Underpinning Skills</p>	<ul style="list-style-type: none"> 3.1 Appropriate practice of personal hygiene 3.2 Intra and Interpersonal skills 3.3 Communication skills
<p>4. Resource Implications</p>	<p>The following resources MUST be provided:</p> <ul style="list-style-type: none"> 4.1 Workplace or assessment location 4.2 Case studies/scenarios
<p>5. Methods of Assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> 5.1 Portfolio Assessment 5.2 Interview 5.3 Simulation/Role-plays 5.4 Observation 5.5 Third Party Reports 5.6 Exams and Tests
<p>6. Context for Assessment</p>	<ul style="list-style-type: none"> 6.1 Competency may be assessed in the work place or in a simulated work place setting

UNIT OF COMPETENCY : PRACTICE OCCUPATIONAL HEALTH AND SAFETY PROCEDURES

UNIT CODE : 500311108

UNIT DESCRIPTOR : This unit covers the knowledge, skills and attitudes required to comply with regulatory and organizational requirements for occupational health and safety.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables
1. Identify hazards and risks	1.1 Safety regulations and workplace safety and hazard control practices and procedures are clarified and explained based on organization procedures 1.2 Hazards/risks in the workplace and their corresponding indicators are identified to minimize or eliminate risk to co-workers, workplace and environment in accordance with organization procedures 1.3 Contingency measures during workplace accidents, fire and other emergencies are recognized and established in accordance with organization procedures
2. Evaluate hazards and risks	2.1 Terms of maximum tolerable limits which when exceeded will result in harm or damage are identified based on threshold limit values (TLV) 2.2 Effects of the hazards are determined 2.3 OHS issues and/or concerns and identified safety hazards are reported to designated personnel in accordance with workplace requirements and relevant workplace OHS legislation
3. Control hazards and risks	3.1 Occupational Health and Safety (OHS) procedures for controlling hazards/risks in workplace are consistently followed 3.2 Procedures for dealing with workplace accidents, fire and emergencies are followed in accordance with organization OHS policies 3.3 Personal protective equipment (PPE) is correctly used in accordance with organization OHS procedures and practices 3.4 Appropriate assistance is provided in the event of a workplace emergency in accordance with established organization protocol
4. Maintain OHS awareness	4.1 Emergency-related drills and trainings are participated in as per established organization guidelines and procedures 4.2 OHS personal records are completed and updated in accordance with workplace requirements

RANGE OF VARIABLES

VARIABLE	RANGE
1. Safety regulations	May include but are not limited to: 1.1 Clean Air Act 1.2 Building code 1.3 National Electrical and Fire Safety Codes 1.4 Waste management statutes and rules 1.5 Philippine Occupational Safety and Health Standards 1.6 DOLE regulations on safety legal requirements 1.7 ECC regulations
2. Hazards/Risks	May include but are not limited to: 2.1 Physical hazards – impact, illumination, pressure, noise, vibration, temperature, radiation 2.2 Biological hazards- bacteria, viruses, plants, parasites, mites, molds, fungi, insects 2.3 Chemical hazards – dusts, fibers, mists, fumes, smoke, gasses, vapors 2.4 Ergonomics 2.4.1 Psychological factors – over exertion/ excessive force, awkward/static positions, fatigue, direct pressure, varying metabolic cycles 2.4.2 Physiological factors – monotony, personal relationship, work out cycle
3. Contingency measures	May include but are not limited to: 3.1 Evacuation 3.2 Isolation 3.3 Decontamination 3.4 (Calling designed) emergency personnel
4. Personal Protective Equipment	May include but are not limited to: 4.1 Mask 4.2 Gloves 4.3 Goggles 4.4 Hair Net/cap/bonnet 4.5 Face mask/shield 4.6 Ear muffs 4.7 Apron/Gown/coverall/jump suit 4.8 Anti-static suits

VARIABLE	RANGE
5. Emergency-related drills and training	5.1 Fire drill 5.2 Earthquake drill 5.3 Basic life support/CPR 5.4 First aid 5.5 Spillage control 5.6 Decontamination of chemical and toxic 5.7 Disaster preparedness/management
6. OHS personal records	6.1 Medical/Health records 6.2 Incident reports 6.3 Accident reports 6.4 OHS-related training completed

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment requires evidence that the candidate:</p> <ul style="list-style-type: none"> 1.1 Explained clearly established workplace safety and hazard control practices and procedures 1.2 Identified hazards/risks in the workplace and its corresponding indicators in accordance with company procedures 1.3 Recognized contingency measures during workplace accidents, fire and other emergencies 1.4 Identified terms of maximum tolerable limits based on threshold limit value- TLV. 1.5 Followed Occupational Health and Safety (OHS) procedures for controlling hazards/risks in workplace 1.6 Used Personal Protective Equipment (PPE) in accordance with company OHS procedures and practices 1.7 Completed and updated OHS personal records in accordance with workplace requirements
<p>2. Underpinning Knowledge</p>	<ul style="list-style-type: none"> 2.1 OHS procedures and practices and regulations 2.2 PPE types and uses 2.3 Personal hygiene practices 2.4 Hazards/risks identification and control 2.5 Threshold Limit Value -TLV 2.6 OHS indicators 2.7 Organization safety and health protocol 2.8 Safety consciousness 2.9 Health consciousness
<p>3. Underpinning Skills</p>	<ul style="list-style-type: none"> 3.1 Practice of personal hygiene 3.2 Hazards/risks identification and control skills 3.3 Interpersonal skills 3.4 Communication skills
<p>4. Resource Implications</p>	<p>The following resources must be provided:</p> <ul style="list-style-type: none"> 4.2 Workplace or assessment location 4.3 OHS personal records 4.3 PPE 4.4 Health records
<p>5. Methods of Assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> 5.1 Portfolio Assessment 5.2 Interview 5.3 Case Study/Situation
<p>6. Context for Assessment</p>	<ul style="list-style-type: none"> 6.1 Competency may be assessed in the work place or in a simulated work place setting

COMMON COMPETENCIES

UNIT TITLE : **APPLY QUALITY STANDARDS**

UNIT CODE : **506315202**

UNIT DESCRIPTOR : This unit covers the knowledge, skills, attitudes and values needed to apply quality standards in the workplace. The unit also includes the application of relevant safety procedures and regulations, organization procedures and customer requirements.

ELEMENT	PERFORMANCE CRITERIA
	<i>Italicized</i> terms are elaborated in the Range of Variables
1. Assess quality of received materials	1.1. Work instruction is obtained and work is carried out in accordance with standard operating procedures. 1.2. Received materials are checked against workplace standards and specifications. 1.3. Faulty materials related to work are identified and isolated. 1.4. Faults and any identified causes are recorded and/or reported to the supervisor concerned in accordance with workplace procedures. 1.5. Faulty materials are replaced in accordance with workplace procedures.
2. Assess own work	2.1. Documentation relative to quality within the company is identified and used. 2.2. Completed work is checked against workplace standards relevant to the task undertaken. 2.3. Errors are identified and isolated. 2.4. Information on the quality and other indicators of production performance are recorded in accordance with workplace procedures. 2.5. In cases of deviations from specific quality standards , causes are documented and reported in accordance with the workplace' s standards operating procedures.
3. Engage in quality improvement	3.1. Process improvement procedures are participated in relative to workplace assignment. 3.2. Work is carried out in accordance with process improvement procedures. 3.3. Performance of operation or quality of product of service to ensure customer satisfaction is monitored.

RANGE OF VARIABLES

VARIABLE	RANGE
1 Materials	1.1 Materials may include but not limited to: 1.1.1. Manuals 1.1.2. Job orders 1.1.3. Instructional videos
2 Faults	2.1 Faults may include but not limited to: 2.1.1. Materials not to specification 2.1.2. Materials contain incorrect/outdated information 2.1.3. Hardware defects 2.1.4. Materials that do not conform with any regulatory agencies
3 Documentation	3.1 Organization work procedures 3.2 Manufacturer's instruction manual 3.3 Customer requirements 3.4 Forms
4 Errors	4.1 Errors may be related but not limited to the following: 4.1.1. Deviation from the requirements of the Client 4.1.2. Deviation from the requirement of the organization
5 Quality standards	5.1 Quality standards may be related but not limited to the following: 5.1.1. Materials 5.1.2. Hardware 5.1.3. Final product 5.1.4. Production processes 5.1.5. Customer service
6 Customer	6.1 Co-worker 6.2 Supplier/Vendor 6.3 Client 6.4 Organization receiving the product or service

EVIDENCE GUIDE

<p>1 Critical aspect of competency</p>	<p>Assessment must show that the candidate:</p> <ul style="list-style-type: none"> 1.1 Carried out work in accordance with the company's standard operating procedures 1.2 Performed task according to specifications 1.3 Reported defects detected in accordance with standard operating procedures 1.4 Carried out work in accordance with the process improvement procedures
<p>2 Underpinning knowledge</p>	<ul style="list-style-type: none"> 2.1 Relevant production processes, materials and products 2.2 Characteristics of materials, software and hardware used in production processes 2.3 Quality checking procedures 2.4 Workplace procedures 2.5 Safety and environmental aspects of production processes 2.6 Fault identification and reporting 2.7 Quality improvement processes
<p>3 Underpinning skills</p>	<ul style="list-style-type: none"> 3.1 Reading skills required to interpret work instruction 3.2 Communication skills needed to interpret and apply defined work procedures 3.3 Carry out work in accordance with OHS policies and procedures 3.4 Critical thinking 3.5 Solution providing and decision-making
<p>4 Method of assessment</p>	<p>The assessor must select two of the following to objectively evaluate the candidate:</p> <ul style="list-style-type: none"> 4.1 Observation and oral questioning 4.2 Third party report 4.3 Portfolio 4.4 Practical demonstration
<p>5 Resource implication</p>	<ul style="list-style-type: none"> 5.1 Materials, software and hardware to be used in a real or simulated situation
<p>6 Context of Assessment</p>	<ul style="list-style-type: none"> 6.1 Assessment may be conducted in the workplace or in a simulated environment

UNIT TITLE : **OPERATE A PERSONAL COMPUTER**
UNIT CODE : **ICT 311203**
UNIT DESCRIPTOR : This unit defines the competency required to operate a personal computer by: starting the PC, logging in, using and working with files, folders and programs, saving work, and closing down the PC.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables
1. Start the computer	1.1 The peripheral devices are properly connected 1.2 Power is checked and the computer and peripheral devices are switched on 1.3 Proper logging in and logging off is successfully done 1.4 The operating system features and functions are accessed and navigated 1.5 Hardware configuration and other system features are checked
2. Arrange and customize desktop display/ GUI settings	2.1 The desktop screen or GUI elements are changed as needed 2.2 Desktop icons are added, renamed, moved, copied or deleted 2.3 The online help functions are accessed or used as needed 2.4 Desktop icons of application programs are selected, opened and closed 2.5 Properties of icons are displayed 2.6 Computer or desktop settings are saved and restored
3. Work with files and folders (or directories)	3.1 A file or folder is created, opened, moved, renamed or copied 3.2 Files are located, deleted and restored 3.3 Details and properties of files and folders are displayed or viewed 3.4 Various files are organized for easy lookup and use 3.5 Files and information are searched 3.6 Disks are checked, erased or formatted as necessary
4. Work with user application programs	4.1 Application programs are added, changed, removed or ran 4.2 User software or application program are installed, updated and upgraded 4.3 Information/data are moved between documents or files
5. Print information	5.1 Printer is added or installed and correct printer settings is ensured 5.2 Default printer is assigned accordingly 5.3 Information or document is printed on the installed printer 5.4 Progress of print jobs are viewed and deleted as required
6. Shut down computer	6.1 All open application programs are closed 6.2 Computer and peripheral devices are properly shut down

RANGE OF VARIABLES

VARIABLE	RANGE
1. Peripheral device	This may include but is not limited to: 1.1 mouse 1.2 keyboard 1.3 monitor or visual display unit 1.4 printer 1.5 scanner
2. Computer	May include: 2.1. Laptops/notebooks 2.2. Workstations 2.3. Servers 2.4. other personal computer devices
3. Application programs	Can include: 3.1 user programs 3.2 database programs 3.3 word processors 3.4 email programs 3.5 Internet browsers 3.6 system browsers 3.7 spreadsheets
4. Operating system	May include but is not limited to the various versions and variants of operating systems running on personal computers and servers, such as: 4.1 Windows 4.2 NT 4.3 Mac OS 4.4 Linux 4.5 Solaris 4.6 Unix
5. System features	May include but is not limited to the operating system features and hardware features like: 5.1 memory size 5.2 disk capacities 5.3 video cards 5.4 USBs 5.5 Modems 5.6 1394 and LAN connectors 5.7 SD and PC cards 5.8 wireless and infrared connections.
6. Online help functions	6.1 An instruction manual, or a portion of the manual, integrated and accessible from within the program or software being used.

VARIABLE	RANGE
7. Properties	Indicates the description of the file or folder to include the: 7.1 file name 7.2 type of file 7.3 file size 7.4 date created and modified 7.5 attributes (hidden, read-only).
8. Various files	8.1 Documents 8.2 Records 8.3 Pictures 8.4 Music 8.5 Video
9. Disks	May include but is not limited to: 9.1 Floppy disks 9.2 CDs 9.3 CD-RW (Compact discs-Read/Write) 9.4 DVD RW 9.5 zip disks 9.6 flash drives 9.7 memory sticks 9.8 hard drives
10. Printer settings	The properties of the printer that enables it to work includes: 10.1 page layout 10.2 paper size 10.3 ink/cartridge type 10.4 number of copies 10.5 page orientation.

EVIDENCE GUIDE

<p>1. Critical aspects of Competency</p>	<p>Assessment must confirm the candidate's ability to:</p> <ul style="list-style-type: none"> 1.1 utilize software 1.2 navigate the desktop 1.3 use system features to perform tasks 1.4 save results of work.
<p>2. Underpinning Knowledge</p>	<p>Knowledge includes:</p> <ul style="list-style-type: none"> 2.1 Keyboard layout and functions 2.2 Computer functions 2.3 Basic parts of a computer and various hardware components 2.4 Storage devices and file concepts 2.5 Basic software operation and functionalities
<p>3. Underpinning Skills</p>	<p>Skills include:</p> <ul style="list-style-type: none"> 3.1 Saving and retrieving files to and from various folders or disk storage 3.2 Mouse and keyboarding skills for running software applications 3.3 Reading and writing at a level where basic workplace documents are understood 3.4 Clear ability to communicate with peers and supervisors 3.5 Interpretation of user manuals and help functions 3.6 The ability to carry out written and verbal instructions using a personal computer whether standalone or in a networked environment
<p>4. Resource Implications</p>	<p>To demonstrate competence in this unit access to the following resources will be required:</p> <ul style="list-style-type: none"> 4.1 A personal computer 4.2 A printer 4.3 Mouse and keyboard 4.4 Basic systems software
<p>5. Methods of Assessment</p>	<p>Competency may be assessed through:</p> <ul style="list-style-type: none"> 5.1 Observation in a workplace or simulated environment 5.2 Third party reports 5.3 Exams and tests 5.4 Demonstration of required skills 5.5 Interviews
<p>6. Context for Assessment</p>	<ul style="list-style-type: none"> 6.1 Competency may be assessed in the workplace or in a simulated work environment.

CORE COMPETENCIES

UNIT TITLE : **PRODUCE CLEANED-UP & IN-BETWEENED DRAWINGS**
UNIT CODE : **ICT 313313**
UNIT DESRIPTOR : This unit covers the knowledge, skills and attitude required to refine key drawings and to produce in-between drawings to ensure that the creative brief is fully met for productions.

ELEMENT	PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables
1. Identify requirements for cleaned -up drawings	<p>1.1 All relevant clean up requirements are identified from the appropriate source material</p> <p>1.2 All relevant model sheets are collected for ready reference.</p> <p>1.3 All key drawings are checked and any problems or errors encountered are referred to appropriate personnel.</p> <p>1.4 All animation breakdowns are checked against the camera sheet, and any problems or errors are referred to relevant personnel.</p> <p>1.5 All necessary materials and equipment are identified and prepared according to the task undertaken</p>
2. Produce cleaned-up drawings	<p>2.1 Cleaned-up drawings produced are consistent with requirements of source materials and within the constraints of the production.</p> <p>2.2 Cleaned-up drawings are matched and modeled to animators' keys.</p> <p>2.3 Agreed design/model in the cleaned-up drawings are precisely reflected in the drawings and that they are within the agreed standards</p> <p>2.4 All animation breakdowns are accurately copied and numbered onto cleaned-up drawings.</p> <p>2.5 Any revision or corrections required are referred to relevant personnel.</p> <p>2.6 Cleaned-up drawings are properly recorded and stored in accordance with company procedures and policies.</p>

ELEMENT	PERFORMANCE CRITERIA <i>Italicized</i> terms are elaborated in the Range of Variables
3. Identify requirements for in-betweened drawings	3.1 All relevant requirements are identified. 3.2 All cleaned-up key drawings are checked, and any problems or errors encountered are referred to the appropriate personnel 3.3 All animation breakdowns are checked against the camera sheet, and any problems or errors encountered are referred to the appropriate personnel
4. Produce in-betweened drawings	4.1 In-betweened drawings produced are within the constraints of the production 4.2 Produced in-betweened drawings precisely reflected the information contained in the animation breakdowns, agreed design and standards 4.3 Cleaned-up key drawings is carefully and accurately interpreted in the in-betweened drawings 4.4 Cleaned-up drawings produced complied with the soundtrack breakdown supplied 4.5 Any corrections to in-betweened drawings are clarified with the relevant personnel

RANGE OF VARIABLES

VARIABLE	RANGE
1. Source material	May include: <ul style="list-style-type: none"> 1.1 Storyboard 1.2 Lay-out drawings 1.3 Director's instructions 1.4 Model sheets 1.5 Exposure sheets 1.6 Soundtrack breakdown 1.7 Key animation drawings
2. Appropriate personnel	<ul style="list-style-type: none"> 2.1 Production designer 2.2 Production manager 2.3 Head of clean-up department 2.4 Animation Director 2.5 Technical director
3. Animation breakdown	<ul style="list-style-type: none"> 3.1 number of in-betweens required 3.2 path of action ad pace

EVIDENCE GUIDE

<p>1. Critical Aspects of Competency</p>	<p>Assessment must show that the candidate:</p> <ul style="list-style-type: none"> 1.1 Produced cleaned-up drawings accurately 1.2 Produced in-betweened drawings clearly 1.3 Produced cleaned-up and in-betweened drawings within the constraints of the production
<p>2. Underpinning Knowledge</p>	<ul style="list-style-type: none"> 2.1 Interpreting scripts, specifications and instructions 2.2 Principles and techniques of animation 2.3 Current animation methods and techniques 2.4 Animation process as related to producing cleaned-up and in-betweened drawings 2.5 Maintaining design integrity 2.6 Life drawing and translation to animated characters 2.7 Color theory, line, dimension, depth and their application on the screen 2.8 Understanding of how animated characters speak and importance of mouth chart
<p>3. Underpinning Skills</p>	<ul style="list-style-type: none"> 3.1 Character drawing 3.2 Cartoon drawing 3.3 Drawing construction skills for character animation, objects and animals 3.4 Animation/drawing techniques <ul style="list-style-type: none"> 3.4.1 dynamic animation poses 3.4.2 line of action 3.4.3 balance and weight in drawing 3.4.4 line art 3.4.5 drawing animation expressions
<p>4. Method of Assessment</p>	<ul style="list-style-type: none"> 4.1 Direct Observation and oral questioning 4.2 Third party report 4.3 Portfolio
<p>5. Resource Implication</p>	<ul style="list-style-type: none"> 5.1 Appropriate supplies and materials 5.2 Applicable equipment
<p>6. Context of Assessment</p>	<ul style="list-style-type: none"> 6.1 Assessment may be conducted in the workplace or in a simulated environment

SECTION 3 TRAINING STANDARDS

3.1 CURRICULUM DESIGN

Course Title: Animation

NC Level: NC II

Nominal Training Duration: 18 hrs – Basic Competencies
18 hrs – Common Competencies
480 hrs – Core Competencies

Course Description:

This course is designed to develop & enhance the knowledge, skills, & attitudes of an Animator in accordance with industry standards. It covers the basic & common competencies in addition to the core competency - produce cleaned-up and in-betweened drawings. The nominal duration of 516 hours covers the required units at Animation NC II. TVET providers can however, offer a longer, ladderized course covering the NC III basic, common and core units.

BASIC COMPETENCIES

18 hrs

Unit of Competency	Learning Outcomes	Methodology	Assessment Approach
1. Participate in workplace communication	1.1 Obtain and convey workplace information. 1.2 Complete relevant work related documents. 1.3 Participate in workplace meeting and discussion.	<ul style="list-style-type: none"> • Group discussion • Interaction 	<ul style="list-style-type: none"> • Demonstration • Observation • Interviews/questioning
2. Work in a team environment	2.1 Describe and identify team role and responsibility in a team. 2.2 Describe work as a team member.	<ul style="list-style-type: none"> • Discussion • Interaction 	<ul style="list-style-type: none"> • Demonstration • Observation • Interviews/questioning
3. Practice career professionalism	3.1 Integrate personal objectives with organizational goals. 3.2 Set and meet work priorities. 3.3 Maintain professional growth and development.	<ul style="list-style-type: none"> • Discussion • Interaction 	<ul style="list-style-type: none"> • Demonstration • Observation • Interviews/questioning
4. Practice occupational health and safety	3.4 Evaluate hazard and risks 3.5 Control hazards and risks 3.6 Maintain occupational health and safety awareness	<ul style="list-style-type: none"> • Discussion • Plant tour • Symposium 	<ul style="list-style-type: none"> • Observation • Interview

COMMON COMPETENCIES

18 hrs

Unit of Competency	Learning Outcomes	Methodology	Assessment Approach
1. Apply Quality Standards	1.1 Asses quality of received materials 1.2 Assess own work 1.3 Engage in quality improvement	<ul style="list-style-type: none"> ▪ Field trip ▪ Symposium ▪ Film showing ▪ Simulation ▪ On the job training 	<ul style="list-style-type: none"> ▪ Demonstration & questioning ▪ Observation & questioning ▪ Third party report
2. Operate a Personal Computer	2.1 Plan and prepare for task to be undertaken 2.2 Input data into computer 2.3 Access information using computer 2.4 Produce output/data using computer system 2.5 Use basic functions of a web browser to locate information 2.6 Maintain computer equipment and systems	<ul style="list-style-type: none"> • Modular • Film showing • Computer based training (e-learning) • Project method • On the job training 	<ul style="list-style-type: none"> • Demonstration & questioning • Observation & questioning • Third party report • Assessment of output product • Portfolio • Computer-based assessment

CORE COMPETENCIES

480 hrs

Unit of Competency	Learning Outcomes	Methodology	Assessment Approach
1. Produce cleaned-up and in-between drawings	1.1. Identify requirements for cleaned up-drawings in actual scene folder (cartoon simple) 1.2. Produce cleaned-up drawings in actual scene folder (cartoon simple) 1.3. Identify requirements for in-between drawings in actual scene folder (cartoon regular) 1.4. Produce in-between drawings in actual scene folder (cartoon regular) 1.5. Identify requirements for in-between drawings in actual scene folder (realistic) 1.6. Produce in-between drawings in actual scene folder (realistic)	<ul style="list-style-type: none"> • Lecture/ Discussion • Hands on • Exercises • Demonstration • Viewing multimedia 	<ul style="list-style-type: none"> • Written exam • Practical exam • Observation in workplace • Interviews/ questioning

3.2 TRAINING DELIVERY

The delivery of training shall adhere to the design of the curriculum. Delivery shall be guided by the 10 basic principles of competency-based TVET.

- The training is based on curriculum developed from the competency standards;
- Learning is modular in its structure;
- Training delivery is learner-centered and should accommodate individualized and self-paced learning strategies;
- Training is based on work that must be performed;
- Training materials are directly related to the competency standards and the curriculum modules;
- Assessment is based in the collection of evidence of the performance of work to the industry required standard;
- Training program allows for recognition of prior learning (RPL) or current competencies;
- Training allows for multiple entry and exit; and
- Training programs are registered with the UTPRAS.

The competency-based TVET system recognizes various types of delivery modes, both on and off-the-job as long as the learning is driven by the competency standards specified by the industry. The following training modalities may be adopted when designing training programs:

- The dualized mode of training delivery is preferred and recommended. Thus programs would contain both in - school and in-industry training or fieldwork components. Details can be referred to the Dual Training System (DTS) Implementing Rules and Regulations.
- Modular/self-paced learning is a competency-based training modality wherein the trainee is allowed to progress at his own pace. The trainer just facilitates the training delivery.
- Peer teaching/mentoring is a training modality wherein fast learners are given the opportunity to assist the slow learners.
- Supervised industry training or on-the-job training is an approach in training designed to enhance the knowledge and skills of the trainee through actual experience in the workplace to acquire specific competencies prescribed in the training regulations.
- Distance learning is a formal education process in which majority of the instruction occurs when the students and instructor are not in the same place. Distance learning may employ correspondence study, or audio, video or computer technologies.
- Project-based instruction is an authentic instructional model or strategy in which students plan, implement and evaluate projects that have real world applications.

3.3 TRAINEE ENTRY REQUIREMENTS

The trainees who wish to enter the course should possess the following requirements:

- At least high school graduate
- 18 – 45 years old
- Able to communicate both oral and written
- With drawing skills
- Must know how to operate a computer
- Good moral character
- Must be physically and mentally fit

This list does not include specific institutional requirements such as educational attainment, appropriate work experience and others that may be required from the trainees by the school or training center delivering the TVET program.

3.4 LIST OF TOOLS, EQUIPMENT AND MATERIALS

Recommended list of tools, equipment and materials for the conduct of training in Animation NC II:

TOOLS		EQUIPMENT		MATERIALS	
Qty.	Description	Qty.	Description	Qty.	Description
	Animation Disc		Ergonomic computer tables and chairs		Animation paper
	Pencil		Light box		Bull clip
	Peg bar		Printer		Learning materials/ guide
	Eraser				Learning elements
	Feather duster				Hand-outs
					Printable storyboard
					Practice materials

The quantity of tools and equipment to be used for the conduct of training for this qualification shall depend on the number of students, size of the class, and/or modality of training. The most important consideration is to make sure that tools and equipment are adequately provided to all trainees when needed. The actual list of tools, equipment, machines, supplies and other materials to be used shall be identified and detailed in the Competency Based Curriculum (CBC) to be submitted by the TVET provider when registering a course or training program with TESDA.

Due to the fast-changing nature of the Information and Communications Technology (ICT) sector, TVET providers are reminded to use and provide their trainees with the latest technology tools, equipment and materials where appropriate and applicable.

In cases where there are specialized tools, equipment and facilities that are not generally considered standard requirements or not absolute requisites for training, the industry working group or TESDA may provide guidelines or specific advice on such matters.

3.5 TRAINING FACILITIES

Based on class size of 25 students/trainees the space requirements for the teaching/learning and circulation areas are as follows:

TEACHING/LEARNING AREAS	SIZE IN METERS	AREA IN SQ. METERS	QTY	TOTAL AREA IN SQ. METERS
Lecture Area	5 x 8	40	1	40
Learning Resource Area	4 x 5	20	1	20
Wash ,Toilet & Locker Room	2 x 5	10	2	20
Total				80
Facilities / Equipment / Circulation**				30
Total Area				110

**** Area requirement is equivalent to 30% of the total teaching/learning areas**

Appropriate consideration should be given in providing and allocating workspace, communications facilities, and the usual workplace amenities to ensure a proper learning environment. Where applicable, training shall be held or conducted in learning facilities in accordance with generally accepted industry standards and practice.

3.6 TRAINERS QUALIFICATIONS

Animation NC II Trainer's Qualification TQ II

- Must be a holder of TESDA Animation NC II or equivalent
- Must have completed Training Methodology II (TM II) course or equivalent
- * Must have at least 2-years relevant industry experience.
- Must be physically & mentally fit.

* Optional: Only when required by the hiring institution.

3.7 INSTITUTIONAL ASSESSMENT

Institutional Assessment is undertaken by trainees to determine their achievement of units of competency. A certificate of achievement is issued for each unit of competency. The institutional assessment is administered by the trainer/assessor.

SECTION 4: NATIONAL ASSESSMENT AND CERTIFICATION ARRANGEMENTS

- 4.1 To attain the National Qualification of **Animation NC II**, the candidate must demonstrate competency in all the units listed in Section 1. Successful candidates shall be awarded a **National Certificate II level** signed by the TESDA Director General.
- 4.2 The qualification of Animation NC II may be attained through demonstration of competence through a single comprehensive project-type assessment covering all required units of competency of this qualification.
- 4.3 Assessment shall focus on the core units of competency. The basic and common units shall be integrated or assessed concurrently with the core units.
- 4.4 The following are qualified to apply for assessment and certification:
 - 4.4.1 Graduate of formal, non-formal, and informal, including enterprise-based, training programs.
 - 4.4.2 Experienced workers (wage employed or self employed)
- 4.5 The guidelines on assessment and certification are discussed in detail in the “Procedures Manual on Assessment and Certification” and “Guidelines on the Implementation of the Philippine TVET Qualification and Certification System (PTQCS)”.

ANNEX A. ICT COMPETENCY MAP – ANIMATION NC II

BASIC COMPETENCIES

Receive and Respond to Workplace Communication	Work with Others	Demonstrate work values	Practice basic housekeeping procedures	Participate in Workplace Communication
Work in a Team Environment	Practice career professionalism	Practice occupational health and safety procedures	Lead Workplace Communication	Lead Small Team
Develop and practice negotiation skills	Solve Problems Related to Work Activities	Use mathematical concepts and techniques	Use relevant technologies	Utilize Specialist Communication Skills
Develop Team and Individuals	Apply Problem Solving Techniques in the Workplace	Collect, analyze and organize information	Plan and Organize Work	Promote environmental protection

COMMON COMPETENCIES

Apply Quality Standards	Operate a Personal Computer
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CORE COMPETENCIES

Communicate effectively in a customer contact center	Render quality customer service	Utilize enterprise/ company technology	Conduct contact center campaign	Provide specialized support and assistance to customers
Lead a contact center work team	Manage the activities of a contact center work team	Use business technology	Use medical technology to carry out task	Produce text from audio transcription
Review/edit documents	Produce key drawings for animation	Produce cleaned-up and in-betweened drawings	Create 2D digital animation	Use an authoring tool to create an interactive sequence
Lead a team in delivering quality service	Produce background designs	Composit and edit animation sequence	Create 3D digital animation	Produce storyboard for animation
Coordinate the production of animation	Manage the activities of a work team	Produce over-all designs for animation		

DEFINITION OF TERMS

GENERAL

- 1) **Certification** - is the process of verifying and validating the competencies of a person through assessment
- 2) **Certificate of Competency (COC)** – is a certification issued to individuals who pass the assessment for a single unit or cluster of units of competency
- 3) **Common Competencies** - are the skills and knowledge needed by all people working in a particular industry
- 4) **Competency** - is the possession and application of knowledge, skills and attitudes to perform work activities to the standard expected in the workplace
- 5) **Competency Assessment** - is the process of collecting evidence and making judgements on whether competency has been achieved
- 6) **Competency Standard (CS)** - is the industry-determined specification of competencies required for effective work performance
- 7) **Context of Assessment** - refers to the place where assessment is to be conducted or carried out
- 8) **Core Competencies** - are the specific skills and knowledge needed in a particular area of work - industry sector/occupation/job role
- 9) **Critical aspects of competency** - refers to the evidence that is essential for successful performance of the unit of competency
- 10) **Elective Competencies** - are the additional skills and knowledge required by the individual or enterprise for work
- 11) **Elements** - are the building blocks of a unit of competency. They describe in outcome terms the functions that a person perform in the workplace
- 12) **Evidence Guide** - is a component of the unit of competency that defines or identifies the evidences required to determine the competence of the individual. It provides information on critical aspects of competency, underpinning knowledge, underpinning skills, resource implications, assessment method and context of assessment
- 13) **Level** - refers to the category of skills and knowledge required to do a job
- 14) **Method of Assessment** - refers to the ways of collecting evidence and when evidence should be collected
- 15) **National Certificate (NC)** – is a certification issued to individuals who achieve all the required units of competency for a national qualification defined under the Training Regulations. NCs are aligned to specific levels within the PTQF
- 16) **Performance Criteria** - are evaluative statements that specify what is to be assessed and the required level of performance

- 17) **Qualification** - is a cluster of units of competencies that meets job roles and is significant in the workplace. It is also a certification awarded to a person on successful completion of a course in recognition of having demonstrated competencies in an industry sector
- 18) **Range of Variables** - describes the circumstances or context in which the work is to be performed
- 19) **Recognition of Prior Learning (RPL)** – is the acknowledgement of an individual's skills, knowledge and attitudes gained from life and work experiences outside registered training programs
- 20) **Resource Implications** - refers to the resources needed for the successful performance of the work activity described in the unit of competency. It includes work environment and conditions, materials, tools and equipment
- 21) **Basic Competencies** - are the skills and knowledge that everyone needs for work
- 22) **Training Regulations (TR)** – refers to the document promulgated and issued by TESDA consisting of competency standards, national qualifications and training guidelines for specific sectors/occupations. The TR serves as basis for establishment of qualification and certification under the PTQF. It also serves as guide for development of competency-based curricula and instructional materials including registration of TVET programs offered by TVET providers
- 23) **Underpinning Knowledge** - refers to the competency that involves in applying knowledge to perform work activities. It includes specific knowledge that is essential to the performance of the competency
- 24) **Underpinning Skills** - refers to the list of the skills needed to achieve the elements and performance criteria in the unit of competency. It includes generic and industry specific skills
- 25) **Unit of Competency** – is a component of the competency standards stating a specific key function or role in a particular job or occupation; it is the smallest component of achievement that can be assessed and certified under the PTQF

SECTOR SPECIFIC

1. **Animation** – a simulation of movement created by displaying a series of pictures, or frames. Cartoons on television are one example of animation. Animation on computers is one of the chief ingredients of multimedia presentations. There are many software applications that enable you to create animations that you can display on a computer monitor.
2. **Clean-up** - refers to the process of refining the rough artwork of 2D animation. The purpose of clean-up is to recreate the animation with smooth, consistent line art and line weights before it is transferred to cels for painting.
3. **Data** - objective measurements of the attributes (characteristics) of entities such as people, places, things, and events.
4. **Documentation** – a collection of documents or information.

5. **Edit** – to modify the form or format of data
6. **End user** – anyone who uses an information system or the information it produces.
7. **Ergonomics** - the science and technology emphasizing the safety, comfort, and ease of use of human-operated machines. The goal of ergonomics is to produce systems that are user-friendly: safe, comfortable and easy to use.
8. **Information** – data placed in a meaningful and useful context for an end user.
9. **Information and Communication Technology (ICT)** - refers to technologies associated with the transmission and exchange of data in the form of sound, text, visual images, signals or any combination of those forms through the use of digital technology. It encompasses such services as telecommunications, posts, multimedia, electronic commerce, broadcasting, and information technology.
10. **Key frame** - is a single still image in an animated sequence that occurs at an important point in that sequence; key frames are defined throughout an animated sequence, in order to define pivotal points of motion before the frames in between are drawn or otherwise created to "tween" the motion between the two key frames.
11. **Local Area Network (LAN)** – a communications network that typically connects computers, terminals, and other computerized devices within a limited physical area such as an office, building, manufacturing plant and other work sites.
12. **Outsourcing** – turning over all or part of an organization's information systems operation to outside contractors, known as systems integrators or facilities management companies.
13. **Quality Assurance** – methods for ensuring that information systems are free from errors and fraud and provide information products of high quality.
14. **Simulation** - the process of imitating a real phenomenon with a set of mathematical formulas. Advanced computer programs can simulate weather conditions, chemical reactions, atomic reactions, even biological processes.
15. **Software** – computer programs and procedures concerned with the operation of an information system.
16. **Standards** – measures of performance developed to evaluate the progress of a system toward its objectives
17. **System** – an assembly of methods, procedures, or techniques unified by regulated interaction to form an organized whole
18. **Tween** - is actually short for "**in-between**", and refers to the creation of successive frames of animation between key frames. In computer animation, the term is most commonly used for Flash's "shape tweening" and "motion tweening" processes, where the user can define two key frames and Flash will automatically create the in-between frames, either morphing one shape into another over a set period of time or else moving a shape or shapes from point A to point B over a set period of time. 3D animation programs also have their own method of "tweening".
19. **User- friendly** – a characteristic of human-operated equipment and systems that makes them safe, comfortable, and easy to use.

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