

|         |  |   |        |        |            |             |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
|---------|--|---|--------|--------|------------|-------------|--|---------|------------|-----------------|--------|--------|------------|-------------|---|-----------------|---------------------------|------|--------|-----|----|---|-----------------|-----------------------|-------|--------|-----|----|---|-----------------|---------------------------------|--------|--------|-----|----|---|-----------------|-----------------|------|--------|-----|----|---|-----------------|-----------------------|-------|--------|-----|----|---|-----------------|---------------------|--------|--------|-----|----|--|--|-------|--|--|------------|------------|
| 1       | Name of Syllabus                       | <b>C. C. IN JEWELLaRY DESIGNING &amp; MANFACTURE.<br/>(416201)</b>  |        |        |            |             |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
| 2       | Max.Nos of Student                     | 25 Students   |        |        |            |             |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
| 3       | Duration                               | 1 year  |        |        |            |             |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
| 4       | Type                                   | Part Time   |        |        |            |             |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
| 5       | Nos Of Days / Week                     | 6 Days  |        |        |            |             |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
| 6       | Nos Of Hours /Days                     | 4 hrs.  |        |        |            |             |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
| 7       | Space Required                         | 1) Workshop = 600 sqfeet<br>2) Class Room = 200 sqfeet<br>TOTAL = 800 sqfeet  |        |        |            |             |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
| 8       | Entry Qualification                    | S.S.C.  |        |        |            |             |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
| 9       | Objective Of Syllabus/<br>introduction | To be familiar with jewellery mfa, its designing stones used, presentation of it.   |        |        |            |             |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
| 10      | Employment Opportunity                 | Can become freelance jewellery design industry, show rooms etc.   |        |        |            |             |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
| 11      | Teacher’s Qualification                | Diploma in jewellery design & Management / C.C. in jewellery designing & Manufacture. With 2 years exam.  |        |        |            |             |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
| 12      | Training System                        | <b>Training System Per Week</b> <table><tr><td>Theory</td><td>Practical</td><td>Total</td></tr><tr><td>06 hrs</td><td>18 hrs</td><td>24 hrs</td></tr></table>   |        |        |            |             |  | Theory  | Practical  | Total           | 06 hrs | 18 hrs | 24 hrs     |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
| Theory  | Practical                              | Total   |        |        |            |             |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
| 06 hrs  | 18 hrs                                 | 24 hrs  |        |        |            |             |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
| 13      | Exam. System                           | <table><tr><td>Sr. No.</td><td>Paper Code</td><td>Name of Subject</td><td>TH/PR</td><td>Hours</td><td>Max. Marks</td><td>Mini. Marks</td></tr><tr><td>1</td><td><b>41620111</b></td><td>Basic designing &amp; drawing</td><td>TH-I</td><td>3 hrs.</td><td>100</td><td>35</td></tr><tr><td>2</td><td><b>41620112</b></td><td>Manufacture Technique</td><td>TH-II</td><td>3 hrs.</td><td>100</td><td>35</td></tr><tr><td>3</td><td><b>41620113</b></td><td>Introduction to computer design</td><td>TH-III</td><td>3 hrs.</td><td>100</td><td>35</td></tr><tr><td>4</td><td><b>41620121</b></td><td>Basic designing</td><td>PR-I</td><td>3 hrs.</td><td>100</td><td>50</td></tr><tr><td>5</td><td><b>41620122</b></td><td>Manufacture Technique</td><td>PR-II</td><td>3 hrs.</td><td>100</td><td>50</td></tr><tr><td>6</td><td><b>41620123</b></td><td>Jewel CAD designing</td><td>PR-III</td><td>3 hrs.</td><td>100</td><td>50</td></tr><tr><td></td><td></td><td>Total</td><td></td><td></td><td><b>600</b></td><td><b>255</b></td></tr></table> |        |        |            |             |  | Sr. No. | Paper Code | Name of Subject | TH/PR  | Hours  | Max. Marks | Mini. Marks | 1 | <b>41620111</b> | Basic designing & drawing | TH-I | 3 hrs. | 100 | 35 | 2 | <b>41620112</b> | Manufacture Technique | TH-II | 3 hrs. | 100 | 35 | 3 | <b>41620113</b> | Introduction to computer design | TH-III | 3 hrs. | 100 | 35 | 4 | <b>41620121</b> | Basic designing | PR-I | 3 hrs. | 100 | 50 | 5 | <b>41620122</b> | Manufacture Technique | PR-II | 3 hrs. | 100 | 50 | 6 | <b>41620123</b> | Jewel CAD designing | PR-III | 3 hrs. | 100 | 50 |  |  | Total |  |  | <b>600</b> | <b>255</b> |
| Sr. No. | Paper Code                             | Name of Subject   | TH/PR  | Hours  | Max. Marks | Mini. Marks |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
| 1       | <b>41620111</b>                        | Basic designing & drawing   | TH-I   | 3 hrs. | 100        | 35          |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
| 2       | <b>41620112</b>                        | Manufacture Technique   | TH-II  | 3 hrs. | 100        | 35          |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
| 3       | <b>41620113</b>                        | Introduction to computer design   | TH-III | 3 hrs. | 100        | 35          |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
| 4       | <b>41620121</b>                        | Basic designing   | PR-I   | 3 hrs. | 100        | 50          |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
| 5       | <b>41620122</b>                        | Manufacture Technique   | PR-II  | 3 hrs. | 100        | 50          |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
| 6       | <b>41620123</b>                        | Jewel CAD designing   | PR-III | 3 hrs. | 100        | 50          |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |
|         |  | Total   |        |        | <b>600</b> | <b>255</b>  |  |         |            |                 |        |        |            |             |   |                 |                           |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                                 |        |        |     |    |   |                 |                 |      |        |     |    |   |                 |                       |       |        |     |    |   |                 |                     |        |        |     |    |  |  |       |  |  |            |            |

## **THEORY – I Basic Designing & Drawing**

### **1 BASIC DESIGNING**

- 1.1 SKETCHING: Pencil control, line drawing . analytical drawing, construction lines, Mark making, positive & negative space
- 1.2 SHA.DING EXERCIZE : Different style, different medium of shading
- 1.3 MODELING : 3D basic different medium
- 1.4 PERSPECTIVE DRAWING, BASIC : Introduction using objects
- 1.5 BASIC RENDERING : Reference to material metal used in Jewellery industry eggs. Wood, Metal
- 1.6 JEWELLARY DESIGNING : Basic -> earring, brooch & other products
- 1.7 ORTHOGRAPHIC VIEWS : Introduction->Using objects  
APPLIED PERSPECTIVE application of orthographic  
TECHNICAL DRAWING in jewellery

### **2 DESIGNS ADVANCE**

- 2.1 METALLURGY : Metal Weights & Alloys -> (Basic)
- 2.2 EXPORT MARKET French. German. American, European, & Indian market, Japan Bangkok (Middle East & far East)
- 2.3 FASHION COSTUME JEWELLERY : Indian = Export
- 2.4 TIME MANAGEMENT
- 2.5 WORKING FOR COMPETITION

## **THEORY -II - Manufacture Technique advance designing**

### **1. MANUFACTURING TECHNIQUES**

- 3.1 Introduction to workshop
- 3.2 Introduction to drill's & Tool : Piercing techniques files and filing.
- 3.3 Surface texturing an Introduction
- 3.4 Soldering : Introduction
- 3.5 basic jewellery making (costume jewellery)
- 3.6 Settings : different kinds of setting
- 3.7 Engraving : Introduction, acid editing (introduction)
- 3.8 Polishing & finishing
- 3.9 Multi - media Workshop
- 3.10 Project study & Making : Includes I. Factory visit 2. Exhibition

## **THEORY – III Introduction to computer design**

### **1 INTUODUCTON TO COMPUTER AIDED JEWELLARY DESIGNING**

1.1 JEWEL CAD the software for jewellery designing and manufacture: JEWEL CAD speeds and facilitates your creativity with a comprehensive database of jewellery forms, surface, stone shapes. 3-D rings, pendants and neckwear you make jewellery designs that are precise in and ready to manufacture. No more worries about straight lines proportion and dimensions. Designs that could be checked and modified even before they move to the production floor. With jewel CAD you save inventory costs by creating accurate replicas of jewellery.

### **Practical - I Basic designing**

#### **1 BASIC DESIGNING**

- 1.1 SKETCHING: Pencil control, line drawing . analytical drawing, construction lines, Mark making, positive & negative space
- 1.2 SHA.DING EXERCIZE : Different style, different medium of shading
- 1.3 MODELING : 3D basic different medium
- 1.4 PERSPECTIVE DRAWING, BASIC : Introduction using objects
- 1.5 PRESENTATION : Mounting ,drafting & layout
- 1.6 STONE DRAWING  
RENDERING : Different shapes-of stones.
- 1.7 ORTHOGRAPHIC VIEWS . : Introduction->Using objects
  - APPLIED PERSPECTIVE : application of orthographicTECHNICAL DRAWING in jewellery

#### **2. DESIGN ADVANCE**

RENDERING ADVANCE : Different surface textures

#### **ADVANCE DESIG**

PRESENTATION ; prespective & technical drawing, orthographics presentations

FASHION COSTUME JEWELLERY : Indian = Export

DESIGN PROJECTS FOR EXPORT : Fine Jewellery & Costme jewelley

MARKET STYLE DESIGN : Indian

MAKING : Costume Jewellery

## **PRACTICAL - II**

### **Manufacture Technique**

#### **5.3 MANUFACTURING TECHNIQUES 200Hrs. 10 Topics, 20 Hrs. per Topics**

- 1.1 Introduction to workshop
- 1.2 Introduction to drill's & Tool : Piercing techniques files and filing.
- 1.3 Surface texturing an Introduction
- 1.4 Soldering : Introduction
- 1.5 basic jewellery making (costume jewellery)
- 1.6 Settings : different kinds of setting
- 1.7 Engraving : Introduction, acid editing (introduction)
- 1.8 Polishing & finishing
- 1.9 Multi - media Workshop
- 1.10 Project study & Making : Includes I. Factory visit 2. Exhibition.

## **PRACTICAL - III**

### **Jewel CAD designing**

#### **The Jewel CAD Approach to Designing:**

- To facilitate the designers creativity accurate and precise designs necessary for product standardization. \* To eliminate errors in product prototypes, in term of metal thickness, stone size & stone weights. \* To helps the designers and the production team by automatic views of jewellery designs in 3d and at various angles \* To provide a tool for precise editing of design a model \* To seed up linking and enhancing design elements across product types: \* To lead to greater productivity with the function of Rapid Prototyping extends from the smallest design unit to multiples and unit put together.

#### **Jewel CAO is 3 Dimensional:**

Jewel Cad eliminates ambiguities of conventional 2 - D hand drawn Jewellery signs. Jewel CA D allows visualization of designs in any desired viewing angles.

#### **Built - in and self created library**

Built - in library containing basic pans, mounting and gems can be further enriched by the users input and storing of self created designs. Thereafter retrieving and assembling is as easy as building blocks on screen

#### **From simple wire frame to full colour image:**

3D Designs are stored as data files taking up minimal disk space. On Screen or hard copy output however can be generated in full realistic colour.

## Ready for rapid prototyping

Design data of Jewel CAD can automatically generate slice data for rapid prototyping without going through tedious pre-processing such as surface trimming to eliminate surface overlapping.

## Computer Numeric Control (CNC) Machine Compactly:

JewelCAD can also generate cutting tool paths for conventional CNC machinery manufacturing.

## LIST OF TOOLS & EQUIPMENT

1. 0.10 mm & 0.13mm (Rotating pens)\*2
2. WATER SOLUBLE PENCIL COLOURS : Steadler or a kit of 24 Colours. Faber castel.
3. WATER COLOUR : 12 (a set)
4. POSTER COLOUR : 12 (a set)
5. BRUSHES : 0'2, 3,00,000.
6. ROUND TEMPLATE, OVAL TEMPLATE : Rataritig company
7. RULER (Small & Big)
8. 0.3, 0.5 : Cluch Pencil.
9. ERASER
10. SET SQUARES : Small & Big
11. GATEWAY PAPERS
12. NEWSPRINT PAPERS
13. EXECUTIVE BONDS.
14. GERMAN ALABASTERS
15. GEOMETRY BOX

| Sr. No. | Description of Tools | No. Required | Remark       |
|---------|----------------------|--------------|--------------|
| 1       | Drawing Board        | 25           | FULL SIZE    |
| 2       | Table Chair          | 25           | FULL SIZE    |
| 3       | Computer             | 5            |              |
| 4       | Jewel CAD (Software) |              | License copy |

**Note** – Practical examination will be conducted on continuous assessments scheme by the Concerned faculty.

## REFERENCE BOOKS

Various periodicals, magazines, journals, timesaver standards, projects, product catalogs should also be used.

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