### **GUJARAT TECHNOLOGICAL UNIVERSITY (GTU)**

# Competency-focused Outcome-based Green Curriculum-2021 (COGC-2021)

Semester - VI

Course Title: Project - II (Course Code: 4365105)

| Diploma programme in which this course is offered | Semester in which offered |
|---|---------------------------|
| Computer Aided Costume Design & Dress Making      | Sixth                     |

#### 1. RATIONALE

This course will enable the students to apply the knowledge and skills developed throughout the programme for implementing the solution of the problem. This course includes designing and implementation of the solution of the identified problem, create product and prepare the project report within the time allocated. This course also aims to develop ethics and managerial skills such as leadership, coordination, teamwork, planning the resources etc. in tune with the current needs of the society and industry through creativity and innovation.

#### 2. COMPETENCY

The course content should be taught and implemented with the aim to develop different types of skills leading to the achievement of the following competency:

• Develop innovative and feasible problem solution optimising the available resources.

#### 3. COURSE OUTCOMES (COs)

The practical exercises, the underpinning knowledge and the relevant soft skills associated with the identified competency are to be developed in the student for the achievement of the following COs:

- a) Acquire the resources required for the development/modification of products or processes.
- b) Develop innovative products or process using suitable technique and material.
- c) Modify the developed products or process.
- d) Complete the developed products or process.
- e) Prepare report of the project.

# 4. TEACHING AND EXAMINATION SCHEME

| Teaching Scheme |        |      | Total Credits |              |     | Examinat                     | ion Scheme |       |
|-----------------|--------|------|---------------|--------------|-----|------------------------------|------------|-------|
|                 | (In Ho | urs) | (L+T+P/2)     | Theory Marks |     | Theory Marks Practical Marks |            | Total |
| L               | Т      | Р    | С             | CA           | ESE | CA                           | ESE        | Marks |
| 0               | 0      | 6    | 3             | 0            | 0   | 50                           | 50         | 100   |

This is designed to facilitate attainment of COs holistically, as there is no theory ESE.

**Legends:** L-Lecture; T – Tutorial/Teacher Guided Theory Practice; P - Practical; C – Credit,

**CA** - Continuous Assessment; ESE -End Semester Examination.

#### 5. SUGGESTED PRACTICAL EXERCISES

NA

## 6. MAJOR EQUIPMENT/INSTRUMENTS REQUIRED

This major equipment with broad specifications for the PrOs is a guide to procure them by the administrators to user in uniformity of all institutions across the state.

| Sr. No. | Equipment Name with Broad Specifications | PrO. No. |
|---------|--|----------|
|         | As per the requirement                   |          |

#### 7. AFFECTIVE DOMAIN OUTCOMES

The following *sample* Affective Domain Outcomes (ADOs) are embedded in many of the above-mentioned COs and PrOs. More could be added to fulfil the development of this course competency.

- a) Work as a leader/a team member.
- b) Practice good housekeeping and environment friendly method.
- c) Follow ethical practices.

The ADOs are best developed through the laboratory/field-based exercises. Moreover, the level of achievement of the ADOs according to Krathwohl's 'Affective Domain Taxonomy' should gradually increase as planned below:

- i. 'Valuing Level' in 1st year.
- ii. 'Organization Level' in 2<sup>nd</sup> year.
- iii. 'Characterization Level' in 3<sup>rd</sup> year.

# 8. UNDERPINNING THEORY

The major underpinning theory is given below based on the higher level UOs of Revised Bloom's taxonomy that are formulated for development of the COs and competency. If required, more such UOs could be included by the course teacher to focus on attainment of COs and competency.

| Unit Outcomes (UOs) (4 to 6 UOs at different levels) |  | Unit Outcomes (UOs) (4 to 6 UOs at different levels) | Topics and Sub-topics |
|--|--|--|-----------------------|
|  |  | Not Ap   | plicable              |

### 9. SUGGESTED SPECIFICATION TABLE FOR QUESTION PAPER DESIGN

|      | Unit<br>Title  | Teaching<br>Hours | Distribution of Theory Marks |       |       |       |
|------|----------------|-------------------|------------------------------|-------|-------|-------|
| Unit |                |                   | R                            | U     | Α     | Total |
| No.  | ride           |                   | Level                        | Level | Level | Marks |
|      | Not Applicable |                   |                              |       |       |       |

**Legends:** R=Remember, U=Understand, A=Apply and above (Revised Bloom's taxonomy)

### 10. SUGGESTED STUDENT ACTIVITIES

These are sample strategies, which the teacher can use to accelerate the attainment of the various outcomes in this course:

- a) Prepare questionnaire for taking preference from the concerned respondents.
- b) Estimate cost of the developed products.
- c) Take the preference from minimum 50 respondents.
- d) Analyze data of the collected responses.

# 11. SUGGESTED SPECIAL INSTRUCTIONAL STRATEGIES (if any)

| Sr.<br>No. | Description   | Marks |  |  |
|------------|---|-------|--|--|
| 1.         | Procure suitable materials for product/process development.   |       |  |  |
| 2.         | Adopt the optimized methodology for developing the product/process.   | 05    |  |  |
| 3.         | Prepare products/process based on the preferences collected in Project -I.      3-5 garments (depending on the size of the garment)      3-5 accessories/ set of accessories (depending on the size of the accessories)      3-5 set of jewelleries (4-5 piece per set depending on size)      3-5 articles (depending on the size of the articles) | 25    |  |  |
| 4.         | Analyze the developed products/process.   | 03    |  |  |
| 5.         | Prepare project report using the prescribed format.   |       |  |  |
| 6.         | Presentation of the final project.  | 07    |  |  |
|            | TOTAL   | 50    |  |  |

# 12. SUGGESTED MICRO-PROJECTS

NA

# 13. SUGGESTED LEARNING RESOURCES

| Sr.<br>No. | Title of Book                                    | Author                       | Publication with place, year and ISBN                          |
|------------|--|------------------------------|--|
| 1          | Research Methodology<br>(Methods and Techniques) | C. R. Kothari                | New Age International<br>Publishers<br>ISBN: 978-81-224-1522-3 |
| 2          | Research Methodology                             | Dipak Kumar<br>Bhattacharyya | Excel Books<br>ISBN: 81-7446-497-2                             |

## 14. SOFTWARE/LEARNING WEBSITES

- a) https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/circulars/12Aug/13082012\_03.pdf
- b) https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/uploads/Internship\_\_\_Project\_Report\_Guidelines\_\_31807 01\_\_661242.pdf

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# 15. PO-COMPETENCY-CO MAPPING

| Semester VI                     |  | PROJECT - II<br>(Course Code: 4365105)<br>POs  |                             |  |   |  |                               |                                   |  |
|---------------------------------|--|--|-----------------------------|--|---|--|-------------------------------|-----------------------------------|--|
| Competency<br>& Course Outcomes |  | PO 1<br>Basic &<br>Discipline<br>specific<br>knowledge                               | PO 2<br>Problem<br>Analysis | PO 3<br>Design/<br>development<br>of solutions | PO 4 Engineering Tools, Experimentation & Testing | PO 5 Engineering practices for society, sustainability & environment | PO 6<br>Project<br>Management | PO 7<br>Life-<br>long<br>learning |  |
|                                 | Competency   | Develop innovative and feasible problem solution optimising the available resources. |                             |  |   |  |                               |                                   |  |
| CO a)                           | Acquire the resources required for the development / modification of product or process. | 3  | 3                           | 2  | 2   | 2  | 2                             | 3                                 |  |
|                                 | Develop innovative product or process using suitable technique and material.             | 3  | 3                           | 3  | 2   | 3  | 3                             | 3                                 |  |
| CO c)                           | Modify the developed product or process.   | 3  | 3                           | 3  | 3   | 3  | 3                             | 3                                 |  |
| CO d)                           | Complete the developed product or process.   | 3  | 2                           | 2  | 2   | 3  | 3                             | 3                                 |  |
| CO e)                           | Prepare report of project.   | 3  | 3                           | 2  | 2   | 2  | 3                             | 3                                 |  |

Legend: '3' for high, '2' for medium, '1' for low and '-' for no correlation of each CO with PO.

# 16. COURSE CURRICULUM DEVELOPMENT COMMITTEE

# **GTU Resource Persons**

| Sr.<br>No. | Name and<br>Designation                 | Institute         | Contact No. | Email                       |
|------------|---|-------------------|-------------|-----------------------------|
| 1          | Dr. F. V. Kugashiya<br>HOD in CACD&DM   | GGP,<br>Ahmedabad | 9825697874  | farjana.kugashiya@gmail.com |
| 2          | Mrs. S. H. Bhatt<br>Lecturer in CACD&DM | GGP,<br>Ahmedabad | 9898068580  | shbhatt99@gmail.com         |
| 3          | Mrs. U. B. Patel<br>Lecturer in CACD&DM | SKJP,<br>Bharuch  | 9825343953  | ubpatel74@gmail.com         |
| 4          | Ku. R. M. Neog<br>Lecturer in CACD&DM   | SKJP,<br>Bharuch  | 9427878160  | jyotirup14@gmail.com        |

# $\underline{\mathsf{Appendix}} - \mathbf{1}$

# **Certificate Format**

| This is to certify that Ms                    |                     |
|---|---------------------|
| from  | college             |
| having Enrollment No:                         | has completed Final |
| Project Report having title                   |                     |
| , individually / in a group consisting of     | persons under the   |
| guidance of the Faculty Guide                 | ·                   |
|   |                     |
| The mentor from the industry for the project: |                     |
| Name:   |                     |
| Industry:                                     |                     |
| Contact Details:                              |                     |
|   |                     |
|   |                     |
| Institute Guide – IDP/ Industry Guide – IDP   | Head of Department  |
|   |                     |

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# Appendix - 2

# **Project Report Guidelines**

PAPER: Use A4 (210mm X 297mm) Paper.

MARGINS: Margins for pages including the regular text should be as below:

Left: 1.25 Inches Right: 1.0 Inch Top: 1.0 Inch Bottom: 1.0 Inch

**CONTENTS:** Following should be the order of contents for the report. This order should be strictly maintained.

- 1. Cover Page
- 2. Certificate (Appendix 1, format prescribed by GTU)
- 3. Acknowledgement
- 4. Abstract
- 5. List of Figures
- 6. List of Tables
- 7. Index
- 8. Chapters
  - 8.1. Introduction
    - 8.1.1. Definition of the problem
    - 8.1.2. Introduction of the topic
    - 8.1.3. Objectives
  - 8.2. Review of literature
  - 8.3. Methodology
  - 8.4. Utility of the Project work and the probable other applications
- 9. Appendix (optional)
- 10. References / Bibliography

**Cover Page / Title Page** – Kindly follow the above link for GTU guideline.

**Certificate** – The Certificate shall be in double line spacing using Font Style Times New Roman and Font Size 14, as per the format in Appendix 1.

**Abstract** – Abstract should be one-page short description of the project report typed 1.5 line spacing, Font Style Times New Roman, italics and Font Size 14.

List of Figures – The list should use the same captions as they appear below the figures in the text. One and a half spacing should be adopted for typing the matter under this head. Figure copied from some paper or website must be captioned with "Courtesy of \_\_\_\_"

**List of Tables** – The list should use the same captions as they appear above the tables in the text. One and a half spacing should be adopted for typing the matter under this head.

*Index* – The table of contents should list all material following it. One and a half spacing should be adopted for typing the matter under this head.

**Chapters** – The chapters may be broadly divided as given.

- Introduction
  - a) Definition of the problem
  - b) Introduction of the topic
  - c) Objectives
- Review of literature
- Methodology
- Utility of the Project work and the probable other applications

#### PREPARATION OF CHAPTERS

#### Colour:

All the text including Tables should be Black prints. However, Graphs and Figures can have colour prints.

#### Font:

**Chapter Headings:** Times New Roman 16pts, bold print all capitals **Section Headings:** Times New Roman 14 pts, bold print all capitals

Subsection Headings: Times New Roman 12 pts, bold print leading capitals (only first

letter in each word should be capital

Regular Text: Times New Roman 12 pts, normal prints

**Special Text:** Times New Roman Italics 12 pts (for foot notes, symbols, quotes, Mathematical notations....)

- Use 1.5 spacing between lines of regular text.
- Use single spacing between:
- Text corresponding to bullets, listing and quotes in the main body of text.
- All paragraphs in the report are to be fully justified from the first line to the last line and should start from left without any hyphenation/indent. Text corresponding to bullets, listings and quotes in the main body of text should be indented.

**Appendices** – Appendices are provided to give supplementary information such as Questionnaire. (Appendices should be numbered using Arabic numerals, e.g. Appendix 1, Appendix 2, etc.).

**List of References** – The listing of references should be typed 4 spaces below the heading "REFERENCES" in alphabetical order in single spacing left – justified.

- a) The reference material should be listed in the alphabetical order of the first author. The name of the author/authors should be immediately followed by the year and other details.
- b) Website citation must be very specific not like 'google.com' or 'wikipedia.org'.
- c) Figure copied from some paper or website has to be captioned with "Courtesy of\_"

A typical illustrative list given below relates to the citation example quoted above.

#### **REFERENCES**

- 1. Ariponnammal, S. and Natarajan, S. (1994) 'Transport Phonomena of Sm Sel X Asx', Pramana Journal of Physics Vol.42, No.1, pp.421-425.
- 2. Barnard, R.W. and Kellogg, C. (1980) 'Applications of Convolution Operators to Problems in Univalent Function Theory', Michigan Mach, J., Vol.27, pp.81–94.