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(Accredited by NAAC with Grade A+)

GU/Acad –PG/BoS - GU-ART /2025-26/736 Date: 29/01/2026

**CIRCULAR**

The approved syllabus of the Goa University–Admission Ranking Test (GU-ART) for **B.Ed. Information and Communication Technology Education** Programme is attached.

The Dean/Vice-Dean (Academic) of the D.D. Kosambi School of Social Sciences and Behavioural Studies and the Principals of all the affiliated Colleges are requested to take note of the above and bring the contents of this Circular to the notice of all concerned, including students aspiring to pursue the Master's Programmes.

ASHWIN V LAWANDE
Digitally signed by ASHWIN V LAWANDE
Date: 2026.01.29 17:34:44 +05'30'

(Ashwin V. Lawande)
Deputy Registrar – Academic

To,
1. The Dean, D.D. Kosambi School of Social Sciences and Behavioural Studies, Goa University.
2. The Vice-Dean (Academic), D.D. Kosambi School of Social Sciences and Behavioural Studies, Goa University.
3. Principals of all the affiliated Colleges.

Copy to:
1. Controller of Examinations, Goa University.
2. Assistant Registrar (Admissions), Goa University.
3. Assistant Registrar Examinations (UG/PG), Goa University.
4. Director, Directorate of Internal Quality Assurance, Goa University for uploading the Syllabus on the University website.

GOA UNIVERSITY

# SYLLABUS FOR GOA UNIVERSITY – ADMISSION RANKING TEST (GU-ART) FOR B.Ed. INFORMATION AND COMMUNICATION TECHNOLOGY EDUCATION PROGRAMME

**Effective from AY: 2026-27**

| Module | Content |
|---|---|
| **Module 1:** | **Information, Communication Technology and Society**<br>1.1. Concept, Importance, Meaning & Nature of Information Communication Technology<br>1.2. Need of information and communication Technology in Education.<br>1.3. Scope of ICT in Education<br>1.4. The relation of ICT to<br>a) Social Development<br>b) Economic Development<br>c) Cultural Development<br>1.5. Ethics in ICT Education |
| **Module 2:** | **The teaching learning process**<br>2.1. Lesson Planning<br>a) Writing Instructional objectives<br>• Cognitive domain (Revised Blooms Taxonomy)<br>• Performance Objectives<br>2.2. Writing Lesson Plans<br>a) Selection of Learning Resources<br>b) Creating learning activities<br>c) Questioning of facilitate learning<br>2.3. Models of teaching<br>a) Meaning of Models of teaching.<br>b) Structure of teaching models<br>c) Types of models of teaching<br>• Advance organizer Model<br>• Glasser's Classroom Meeting Strategy Model |
| **Module 3:** | **Instructional Design**<br>3.1. Basic principles of Instructional Design<br>3.2. Writing Instructional goals<br>3.3. System Approach to instructional design.<br>3.4. Programmed Instruction |

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| | a) Principal of PI<br>b) Styles of programming in PI<br>3.5. Analyzing instructional content (Task Analysis)<br>a) Hierarchical Analysis<br>b) Procedural Analysis<br>3.6. Courseware Design |
| **Module 4:** | **ICT- Teaching and Assessment**<br>4.1. Training Psychology<br>a) Meaning<br>b) Use of training psychology in ICT Education.<br>4.2. Learner Controlled Instruction (LCI) a) Meaning b) Advantages of LCI<br>4.3. Personalized system of Instruction (PSI)<br>a) Meaning<br>b) Characteristics and advantages of PSI<br>4.4. Assessment<br>a) Assessment of students practical work<br>b) Assessing current educational software |
| **Module 5:** | **Mass media approach to teaching learning and ICT supported teaching learning strategies**<br>5.1. The role of Television and its supporting media (Video, VCD, DVD)<br>5.2. Intranet and Internet a) Concept need and importance b) Facilities available for communication- Email, chat, online conferencing, (Audio, video), e- Library website, Blog, wiki Internet forum, News group.<br>5.3. Search Engines - Concept and users<br>5.4. Use of Instructional Media<br>a) Media Projector<br>b) Interactive White board<br>c) Social Media<br>d) Cellular Phones<br>5.5. CAL - Computer Assisted Learning<br>5.6. PBL – Project Based Learning<br>5.7. Introduction of E-learning<br>a) E-learning - Concept and nature<br>b) Web based Learning<br>c) Virtual Classroom<br>d) Role of EDUSAT |
| **Module 6:** | **Introduction to Computer**<br>6.1. Computer – Definition & Structure<br>6.2. Hardware:<br>a) Input devices – Key Board, Mouse, Microphone, Digital Camera<br>b) Output Storage – Monitor, Printer Speaker Screen Image Projector<br>c) Storage Devices – Hard Dusk, CD, & DVD Mass storage devices.<br>6.3. Software<br>a) Operating System<br>b) Application Software (Its uses in Education) |

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| | • Word Processors<br>  ○ Basic formatting techniques (Editing, use of graphics and Tablets)<br>• Presentation<br>  ○ Basic features of presentation software- elements of a slide, formatting a slide (font, color, graphics, animation, design templates, slide transitions and sound)<br>• Spread sheet<br>  ○ Basic function of spreadsheet – Insert (Row/Column) delete row, column format (cell table) alignment, data type<br>  ○ Calculations (date, summation, count, sort, average and use of filters) Test processing and graphics<br>• Database Management Types of Database, Use of Database |
| **References** | 1. Orlich, Donald C. et al Teaching Strategies<br>2. Zook, Kevin B Instructional design for classroom Teaching and learning<br>3. Reece, lan and Stephen walker, Teaching Training and learning<br>4. Geoffrey Petty Teaching Today<br>5. Information Communication Technology. The national curriculum for England |