



GUJARAT TECHNOLOGICAL UNIVERSITY

Bachelor Of Engineering (Minor / Honours Syllabus)

Subject Code : N117AF01(w.e.f. AY 2026-27)

Subject Name : Smart Governance for Smart City

Type of course: Professional core subject

Prerequisite: Basic understanding on governance system.

Rationale: This course familiarizes students with different concepts of E-Government and E-Governance, different E-Governance models and infrastructure development, E-government security.

Teaching and Examination Scheme:

Teaching Scheme			Credits	Examination Marks		Total Marks
L	T	P		Theory Marks		
			ESE (Th)	ESE (Pr)		
3	0	2	4	70	30	100

Content:

Sr. No.	Topics	Teaching Hrs.
1.	Introduction: Governance in general, Types of Governance Governance as Information System; Benefits of Governance; Governance Life Cycle; Online Service Delivery and Electronic Service Delivery; Evolution, Scope and Content of Governance; Present Global Trends of Growth in Governance.	8
2.	Models of Smart Governance: Introduction; Model of Digital Governance: Broadcasting / Wider Dissemination Model, Critical Flow Model, Comparative Analysis Model, Mobilization and Lobbying Model, Interactive – Service Model / Government-to-Citizen-to-Government Model (G2C2G); Evolution in Smart Governance and Maturity Models: Five Maturity Levels; Characteristics of Maturity Levels; Towards Good Governance through Smart Governance Models	12
3.	Governance for Infrastructure Development Network Infrastructure; Computing Infrastructure; Data centers; Smart Governance Architecture; Interoperability Framework; Cloud Governance; E-readiness; Data System Infrastructure; Legal Infrastructural Preparedness; Institutional Infrastructural Preparedness; Human Infrastructural Preparedness; Technological Infrastructural Preparedness, Case studies	15
4.	Security for Governance:	10



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Challenges and Approach of Smart Governance Security; Security Management Model; Smart Governance Security Architecture; Security Standards	
Total Hrs.	45

Suggested Specification table with Marks (Theory/Practical):

% Distribution of Marks					
R Level	U Level	A Level	N Level	E Level	C Level
10%	30%	25%	15%	10%	10%

Legends: R: Remembrance, **U:** Understanding; **A:** Application, **N:** Analyze, **E:** Evaluate **C:** Create and above Levels (**Revised Bloom's Taxonomy**)

Reference Text Books:

1. Smart Governance – Governing the Global Knowledge, University of Chicago Press (25 May 2007), ISBN-10 : 3593382539
2. Smart Governance for Cities: Perspectives and Experiences, Nuno Vasco Moreira Lopes, Springer
3. Smart Cities and Smart Governance, Elsa Estevez, Theresa A. Pardo, Hans Jochen Scholl, Springer; 1st ed. 2020 edition (28 January 2021).
4. Understanding Smart Cities: A Tool for Smart Government or an Industrial Trick?, Understanding Smart Cities: A Tool for Smart Government or an Industrial Trick?, Springer; 1st ed. 2017 edition (25 July 2018)
5. Smart City Governance, Alios Paulin, Elsevier; 1st edition (December 19, 2018)

Course Outcome:

No.	Course Outcomes	RBT Level*
1	Acquire the basic knowledge of smart-governance and smart-government	UN
2	Explore different smart-governance models.	UN, AN
3	Understand the concept of smart-governance infrastructure development.	UN, AP
4	Understand the safety measures of smart-governance.	AN,AP, EL
5	Understand the different case studies for implementing in smart-governance.	RM,CR

*RM:Remember,UN:Understand,AP:Apply,AN:Analyze,EL:Evaluate,CR:Create

List of Experiments:



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- **E-Governance system**
 - Understanding a case study and prepare a report on e-governance budget allocated by the GOI for different cities.
- **Implementing e-governance models in a city and systems.**
 - Detailed study of existing smart city with E-governance and providing valuable inputs
- **Developing a Smart City**
 - Building up a smart city implementing various criterion and components of a smart city.

List of Open Source/learning website:

- <https://lms.gov.in>
 - National e-governance system
- <https://publicadministration.un.org/egovkb/en-us/about/unegovdd-framework>
 - E-government system by UN

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