Computer Graphics Technology – Building Information Modeling (BINM)
Purdue Polytechnic Institute

PICGT-BS
Catalog Term: 201710
120 Credit Hours to Graduate
"C-"or better required in all major courses

Departmental/Program Major Courses (41 credits)
Required Major Courses (32 credits)

- (2) CGT 10101 – Foundations of Computer Graphics Technology
- (3) CGT 11600 – Geometric Modeling for Visualization and Communication
- (3) CGT 11800 – Fundamentals of Imaging Technology
- (3) CGT 14100 – Internet Foundations, Development & Technologies
- (3) CGT 21500 – CG Programming I
- (1) CGT 25001 – Professional Practices I
- (3) CGT 26200 – Intro to Construction Graphics
- (3) CGT 36000 – Applications of Construction Documentation I
- (2) CGT 41101 – Contemporary Problems in Applied CGT I
- (2) CGT 41201 – Contemporary Problems in Applied CGT II
- (1) CGT 45001 – Professional Practices II
- (3) CGT 46000 – Building Information Modeling for Commercial Construction
- (3) CGT 46200 - Applications of Construction Documentation II

Major Selectives* - Select 3 of the following courses (9 credits)
http://www.tech.purdue.edu/CGT/academics/coursepages.cfm

- (3) CGT Selective
- (3) CGT Selective
- (3) CGT Selective

Other Departmental /Program Course Requirements (64 credits)

- (3) COM 11400 – Speech Communication *(satisfies Oral Communication for core)*
- (3) ECON 21000 – Principles of Economics *(satisfies Human Culture Behavior/Social Science for core)*
- (3) ENGL 10600 or ENGL 10800 *(satisfies Written Communication for core)*
- (3) MA 15800 – PreCalculus (*satisfies Quantitative Reasoning Selective for core*)
- (3) MA 16010 – Applied Calculus I (satisfies *Quantitative Reasoning Selective* for core)
- (3) MGMT 45500 – Legal Background For Business I
- (4) PHYS 21800 – General Physics *(satisfies Science Selective for core)*
- (3) PSY 12000 – Elementary Psychology (*satisfies Human Culture Behavioral/Social Science for core*)
- (3) TECH 12000 – Design Thinking *(satisfies Information Literacy AND Science, Technology & Society Selective for core)*
- (3) Human Cultures *(satisfies Humanities for Core)*
- (6) Humanities Elective
- (3) Science Selective *(satisfies Science Selective for Core)*
- (3) Advanced English Selective
- (3) Statistics Selective
- (3) Communication Selective
- (3) Management Selective
- (3) CGT Global Selective
- (9) Technical Electives

Electives (15 credits)

- (3) Free Elective
- (3) Free Elective
- (3) Free Elective
- (3) Free Elective
- (3) Free Elective

University Core Requirements

Human Cultures Humanities	☐	*Science, Technology & Society Selective*	☐
Human Cultures Behavioral/Social Science	☐	*Written Communication*	☐
Information Literacy	☐	*Oral Communication*	☐
Science Selective	☐	*Quantitative Reasoning*	☐
Science Selective	☐		

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The student is ultimately responsible for knowing and completing all degree requirements.

myPurduePlan is knowledge source for specific requirements and completion

Computer Graphics Technology – Building Information Modeling (BINM)

https://tech.purdue.edu/degrees/computer-graphics-technology/plan-of-study

Suggested Arrangement of Courses:

Cr		Fall 1st Year	Prerequisite	Cr		Spring 1st Year	Prerequisite
2		CGT 10101 Foundations of CGT	Major	3		CGT 11600 Geo Mdl Visual & Comm	Major
3		CGT 11800 Fund. Of Imaging Tech*	Major	3		CGT 14100 Internet Fdtn Dev & Tech	Major
3		TECH 12000 Design Thinking *		3		COM 11400 Speech Communication*	
3		English Selective*		3		PSY 12000 Elem. Psychology*	
3		MA 15800 Precalculus*	ALEKS 60%	3		MA 16010 Applied Calculus I*	MA 158 or ALEKS 75%
14				15			

Cr		Fall 2nd Year	Prerequisite	Cr		Spring 2nd Year	Prerequisite
3		CGT 21500 CG Programming I	CGT 141 & Conc MA 16010	3		CGT 36000 Apps of Constr. Docs I	CGT 26200
3		CGT 26200 – Intro to Const. Graph		3		Human Cultures: Humanities Core*	
4		PHYS 21800 Gen Physics*		3		Science Foundational Selective Core*	
3		Free Elective		3		ECON 21000 Principles of Econ	
3		Technical Elective		3		Free Elective	
				1		CGT 25001 Professional Practices I	
16				16			

Cr		Fall 3rd Year	Prerequisite	Cr		Spring 3rd Year	Prerequisite
3		CGT 46200 Apps Const Docs II	CGT 36000	3		CGT 46000 – Build Info Mod Comm Cst	CGT 36000
3		CGT Selective		3		CGT Selective	
3		Humanities Elective		3		CGT Globalization Selective	
3		Advanced English Selective	ENGL 106 or 108	3		Statistics Selective	
3		Free Elective		3		Management Selective	
15				15			

Cr		Fall 4th Year	Prerequisite	Cr		Spring 4th Year	Prerequisite
3		CGT Selective		1		CGT 45001 Professional Practices II	SR Standing
3		Humanities Elective		2		CGT 41201 Contemp Prob in CGT II	SR Standing
3		Free Elective		3		Free Elective	
3		MGMT 45500 Leg. Backgrd for Bus I		3		Communication Selective	
3		Technical Elective		3		Technical Elective	
2		CGT 41101 Contemp Prob in CGT I					
17				12			

*Satisfies a University Core Requirement

Students must earn a "C-" or better in all CGT courses.
120 semester credits required for Bachelor of Science degree.
2.0 Graduation GPA required for Bachelor of Science degree.
Purdue policy states that a student may attempt a course no more than three (3) times. An attempt is defined as all courses displayed on a student's transcript including, but not limited to A,B,C,D,E,F,W,WF,I and IF

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Revised 3/2016 (effective Fall 2016)

SUPPLEMENTAL CGT INFORMATION

CGT SELECTIVES:

Virtual Product Integration
CGT 22600 Intro to Constraint-Based Modeling (CGT 116, 110, or 163)
CGT 32600 Graphic Standards for Product Definition (CGT 226) (SP)
CGT 42300 Product Data Management (CGT 226) (SP)
CGT 42600 Industry Applications of Simulation & Visualization (CGT 226) (FA)

Animation
CGT 24100 Intro to Computer Animation (CGT 116)
CGT 34000 Digital Lighting& Rendering for Computer Animation (CGT 241)
CGT 34100 Motion for Computer Animation (CGT 340)
CGT 34600 Digital Video & Audio
CGT 44200 Production for Computer Animation (CGT 341) (FA)
CGT 44600 Post-Production & Special Effects for Computer Animation (CGT 241 & Senior Standing) (SP)

Web Programming & Development
CGT 25600 Human Computer Interface Theory & Design (SP)
CGT 35300 Principles of Interactive & Dynamic Media (Co-Req CGT 356) (FA)
CGT 35600 Web Programming, Development, & Data Integration (CGT 215, CNIT 267, or CS 180)
CGT 45600 Advanced Web Programming, Development, & Data Integration (CGT 356) (SP)

Game Studies
CGT 34500 Game & Simulation Development (MA 153 or higher, CGT 241, & CGT 215, CS 180, or CNIT 267) (FA)
CGT 44500 Video Game Design & Development (CGT 245 or 345) (SP)

Human Centered Design & Development
CGT 17207 CGT Experiential Studio I
CGT 17208 HCDD Design Studio I
CGT 27108 HCDD Studio II
CGT 27207 CGT Experiential Studio II
CGT 27208 HCDD Studio III
CGT 37207 CGT Experiential Studio III
CGT 37208 HCDD Studio IV

Effects Technical Direction
CGT 14700 VFX-Introduction
CGT 24600 Compositing I
CGT 24700 VFX-Particles and Procedures for FX
CGT 24800 VFX-Pyro & Destruction FX
CGT 24900 VFX – Programming
CGT 34800 Photorealistic Shaders
CGT 34900 VFX – Technical Directing

Data Visualization
CGT 27000 Introduction to Data Visualization
CGT 37000 Interactive Data Visualization
CGT 37700 Scientific Visualization
CGT 47700 Visualization Studio

TECHNICAL ELECTIVE: Any course within the Purdue Polytechnic Institute, Engineering, Management, or Science.

HUMAN CULTURES: HUMANITIES CORE:
See http://www.purdue.edu/provost/initiatives/curriculum/course.html for approved Humanities Core Courses.

COMMUNICATION SELECTIVE:
COM 30000 or 40000 level

ADVANCED ENGLISH SELECTIVE
ENGL 20500 Introduction to Creative Writing   ENGL 42000 Business Writing
ENGL 30400 Advanced Composition   ENGL 42100 Technical Writing
ENGL 41900 Multimedia Writing

SCIENCE FOUNDATIONAL SELECTIVE CORE:
See http://www.purdue.edu/provost/initiatives/curriculum/course.html for approved Science Core Courses.

STATISTICS SELECTIVE:

STAT 22500 Introduction to Probability Models
STAT 30100 Elementary Statistical Methods

PSY 20100 Introduction to Statistics in Psychology
IT 34200   Introduction to Statistical Quality

MANAGEMENT SELECTIVE:

Any course in Organizational Leadership & Supervision (OLS), Technology, Leadership & Innovation (TLI), Management (MGMT), Economics (ECON), Entrepreneurship (ENTR), or Organizational Behavior & Human Resources (OBHR)

CGT GLOBALIZATION SELECTIVE:

AD 25500 Art Appreciation
AD 45400 Modern Architecture
AGEC 25000 Econ. Geography of World Food
ANTH 10000 Introduction to Anthropology
ANTH 20500 Human Cultural Diversity
ANTH 21200 Culture, Food, and Health
ANTH 23000 Gender Across Culture
ANTH 31200 The Archaeology of Ancient Egypt
ANTH 32700 Environment and Culture
ANTH 33600 Human Variation
ANTH 38000 Using Anthropology in the Word
ARAB 23000 Arabic Literature in Translation
ASAM 24000 Intro to Asian American Studies
ASAM 34000 Contemp. Issues in Asian America
CHNS 28000 Topics in Chinese Civiliz. & Culture
CLCS 18100 Classical World Civilizations
CLCS 23100 Survey of Latin Literature
CLCS 28000 Topics in Classic Civilizations
CLCS 38500 Sci, Med, and Magic in Ancient West
CMPL 23000 Intro to Comparative Literature
CMPL 26600 World Lit to 1700 A D
CMPL 26700 World Lit from 1700 to now
COM 22400 Com in the Global Workplace
COM 30300 Intercultural Communication
EAPS 37500 Fossil Fuels, Energy, and Society
EEE 35500 Eng Environmental Sustainability
ENGL 23000 Great Narrative Works
ENGL 24000 British Lit Through 18th Century
ENGL 24100 Brit Lit From Romantic. to Modern
ENGL 26600 World Literature to 1700 A D
ENGL 26700 World Literature 1700 to now
ENGL 34100 Topics in Sci, Lit, and Culture
FNR 10300 Intro to Environm. Conservation
HDFS 28000 Diversity in Individ. & Family Life
HEBR 28000 Modern Israel: Cinema, Lit, ect.
HEBR 28400 Ancient Near E Hist and Culture
HIST 10300 Intro to the Medieval World
HIST 10400 Intro to the Modern World
HIST 10500 Global History
HIST 20400 East Asia in the Modern World
HIST 24100 East Asia in the Modern World

HIST 24300 South Asian History and Civilization
HIST 24500 Middle East History and Culture
HIST 25000 US Relations, Mid. East & N. Africa
HIST 27200 Latin American History from 1824
HIST 31700 History of the Christian Church I
HIST 32900 Women in Modern Europe
HIST 33400 Sci & Tech in West. Civilization II
HIST 34200 Africa and the West
HIST 35100 Second World War
HIST 36100 Violence in Africa
HIST 37500 US Women Since 1870
JPNS 28000 Intro to Modern Japanese Civilization
JWST 33000 Intro to Jewish Studies
LC 23500 East Asian Literature
LC 23900 Contemporary Foreign Women Writers
PHIL 11400 Global Morals Issues
PHIL 20600 Philosophy of Religion
PHIL 21900 Intro to Existentialism
PHIL 24000 Social & Political Philosophy
PHIL 24200 Phil, Culture & African American Exp
PHIL 27000 Biomedical Ethics
PHIL 29000 Environmental Ethics
PHIL 33000 Religions of the East
PHIL 33100 Religions of the West
POL 13000 Intro to International Relations
POL 14100 Governments of the World
POL 22200 Women, Politics and Public Policy
POL 2300 Intro to the Study of Peace
POL 23100 Intro to US Foreign Policy
POL 23500 Rich and Poor Nations
POL 23700 Modern Weapons & Internationl Relatns
POL 30400 Israel and World Politics
POL 32700 Green Global Politics
POL 34200 Govt and Politics in the Communist Successor States
POL 34500 West European Democracies in the Post-Industrial Era
POL 34800 East Asian Politics
SOC 33800 Global Social Movements
SOC 33900 Introduction to Sociology of Developing Nations
TECH 33000 Tech & the Global Society
Any foreign language course of 201, 202, 301, 302, 401, 402, or 235
Any Study Abroad experience on your Purdue Transcript

Departmental Policy

It is the responsibility of each student to assure that he or she fulfills the necessary pre-requisites and courses to meet graduation requirements. Questions may be directed to a CGT advisor.

Each student must have 32 credit hours of 300- or 400-level Purdue courses for graduation.