

HCC Houston Community College	Department of Drafting & Design Engineering Technology	Hybrid
DFTG-2331 Advanced Technologies in Architectural Design and Drafting (Revit-Commercial)	Syllabus	Semester: <b>Fall 2017</b> Class (CRN) # <b>42676</b>
Semester Credit Hours (SCH): 96         Credit Hours: 3         Format: Lecture: 1/3 Lab and/or Web: 2/3         Weekly class meetings and home assignments:         For 16-wk regular semester: 6 hrs. (4-5 hrs. for WE class)         For 2 <sup>nd</sup> Start 12-wk term: 8 hrs. (4.8-6 hrs. for WE class)         For Summer 8wk term: 12 hrs (7.2-9 hrs. for WE class) <u>Note:</u> Web Enhanced classes include online assignments.	Professor/Instructor: Iwao Takahashi Contact phone number: TBA Other phone number: TBA Best times to call: _ TBA Email: iwao.takahashi@hccs.edu	Class meeting location: • Campus _SE Workforce , Room _305_ • Date: (i.e. Mon) _Thursday_ • Time: :11:00am-2:50pm
Any question or concern, please contact your instructor first. You can also contact Lead Faculty or department administration for further assistance. Thank you.	Acting Faculty Department Chair: <b>Nelson</b> <b>Simpson</b> Phones: <b>713 718-5234</b> Rowena Hubbard, Dept. Assistant: <b>713-718-8033</b> Email: <u>nelson.simpson@hccs.edu</u>	<b>Office:</b> 1265 Pinemont Dr., Suite 151, MC 1376 Houston, Texas 77018.

Semester with Course Reference Number (CRN)	Fall 2017 CRN 42676
Instructor contact information (phone number and email address)	Dr. Iwao Takahashi iwao.takahashi@hccs.edu
Office Location and Hours	n/a
Course Location/Times	Southeast- Workforce, Room 305 Thursday 11:00 AM – 2:50 PM
Course Semester Credit Hours (SCH) (lecture, lab) If applicable	Credit Hours:3Lecture Hours:2Laboratory Hours:4External Hours:4

Total Course Contact Hours	96.00		
Course Length (number of weeks)	12 Weeks		
Type of Instruction	Lecture and Lab		
Course Description:	Use of architectural specific software to execute the elements required in designing standard architectural exhibits utilizing custom features to create walls, windows and specific design requirements for construction in residential/commercial and industrial architecture.		
Course Prerequisite(s)	DFTG 1376. Must be placed into GUST 0341 in reading, ENGL 0300 or 0347 in writing and MATH 0306 in math.		
Course Textbook	The Aubin Academy Revit Architecture, Author: Paul F Aubin, Publisher: G3B Press, ISBN-13: 978-0-692-47039-8		
Recommended Course Textbook By The Instructor	The Aubin Academy Revit MEP 2015, Author: Paul F Aubin, Darryl McClelland, and Martin Schmid, ISBN-13: 978-1500435431		
Academic Discipline/CTE Program Learning Outcomes	<ol> <li>Identify appropriate use and procedures of architectural design and construction specific software designing residential building.</li> <li>Analyze building materials characteristics with energy efficiency, and application to the commercial building.</li> <li>Participation to an educational workshop currently emphasized in the related industries.</li> <li>Develop the application of aesthetic, functional, and technological aspect of building design activity.</li> </ol>		
Course Student Learning Outcomes (SLO): 4 to 7	<ol> <li>Laboratory work, Commercial Green Building for Architecture, MEP, and Structure – (50% evaluation of grade)</li> <li>Whole Building Energy Analysis and Peak Load Building Thermal Load Determination – (10%)</li> <li>Autodesk BPA online workshop (at least three courses) – (10 % of evaluation of grade)</li> <li>Demonstration of knowledge and skills of Revit software through mid-term and final examination – (20% evaluation of grade)</li> <li>Demonstration of professionalism through course activities, online discussions, and participations to the course work – (10% evaluation of grade)</li> </ol>		
Learning Objectives (Numbering system should be linked to SLO - e.g., 1.1, 1.2, 1.3, etc.) SCANS and/or Core Curriculum	<ol> <li>Comprehend the intermediate level of Revit software function and identify the building materials and construction method energy efficiency relevant to these functions.</li> <li>Create a sustainable commercial building design with appropriate process and procedure, method, and technology.</li> <li>Identify current industry emphasis of importance for building design and construction.</li> <li>Demonstrate professionalism.</li> </ol>		
Core Curriculum Competencies: If applicable			

## Instructional Methods

## Student Assignments

- 1. Laboratory work, Commercial Green Building for Architecture, MEP, and Structure (50% evaluation of grade)
- 2. Whole Building Energy Analysis and Peak Load Building Thermal Load Determination (10%)
- 3. Autodesk BPA online workshop (at least three courses) (10 % of evaluation of grade)
- 4. Demonstration of knowledge and skills of Revit software through mid-term and final examination (20% evaluation of grade)
- 5. Demonstration of professionalism through course activities, online discussions, and participations to the course work (10% evaluation of grade)

WEEK	Lecture Topic	Student Project	Study Resources.	Assignment
WEEK 1	Introduction,	Schematic Design	Syllabus,	Site Selection
WEEK 2	Design Process, Schematic Design	Schematic Design	Arch Textbook	BPA (at least three courses), Schematic Design
WEEK 3	Schematic Design and Energy Analysis	Schematic Design, Energy Analysis	Arch Textbook	BPA, Schematic Design
WEEK 4	Schematic Design and Presentation	Schematic Design, Presentation	Arch Textbook	BPA, Schematic Design
WEEK 5	Preliminary Design- Architecture	Preliminary Design - Architecture	Arch Textbook	BPA, Preliminary Design
WEEK 6	Preliminary Design-Arch and Structure	Preliminary Design – Arch and Structure	Arch Textbook	BPA, Preliminary Design
WEEK 7	Preliminary Design- Structure	Preliminary Design - Structure	Arch Textbook	BPA, Preliminary Design, Energy Analysis - Whole
WEEK 8	Preliminary Design – HVAC	Preliminary Design - HVAC	MEP Textbook	Mid-term Exam, Peak Thermal Load Calculation
WEEK 9	Preliminary Design - HVAC	Preliminary Design - HVAC	MEP Textbook	BPA, Preliminary HVAC Plan
WEEK 10	Preliminary Design - HVAC	Preliminary Design - HVAC	MEP Textbook	BPA, Preliminary HAVC Plan
WEEK 11	Construction Documents - Architecture	Construction Documents - Architecture	ТВА	Construction Documents - Architecture
WEEK 12		Class Presentation Final	n/a	Student Presentation Final Exam BPA due
WEEK 13				
WEEK 14				

Course Schedule, Outline, and Assignments

	WEEK 15	ТВА	ТВА	TBA	Construction Documents - Architecture
HCC Grading	WEEK 16				
Scale:					
	A = 100- 90		4 po	ints per semester	hour
	B = 89 - 80:		3 ро	ints per semester	hour
	C = 79 - 70:2 points per semester hourD = 69 - 60:1 point per semester hour59 and below = F0 points per semester hourFX (Failure due to non-attendance)0 points per semester hourIP (In Progress) / W (Withdrawn)0 points per semester hour			hour	
				our	
	I (Incomplete)	) / AUD (Audit)	0 ро	ints per semester	hour
Instructor's					
Requirements	<ul> <li>Provid are to</li> <li>Facilit lecture</li> <li>Descr</li> <li>Inform</li> <li>Provid specia</li> <li>Arrange</li> </ul>	be derived ate an effective lea es iption of any specia n students of policie de the course outlin al projects or assigr ge to meet with indi sful in this class, it is	e and detailed grading t rning environment thro Il projects or assignmen s such as attendance, e and class calendar w	ugh class activitie nts withdrawal, tardin /hich will include a and after class as sibility to:	s, discussions, and ess and make up description of any
Program/Discipline Requirements: If applicable	<ul> <li>Read</li> <li>Comp</li> <li>Midte</li> <li>Ask for</li> <li>Keep</li> <li>Business Tech</li> <li>succeed in too</li> <li>Thinking must weekly basis.</li> </ul>	and comprehend the lete the required as rm Exam / Final Ex- pr help when there is copies of all papers hnology is determined ay's dynamic work be able to budget to Students also performed	ne textbook ssignments and exams am s a question or problen vork, including this sylla ed to prepare students	: abus, handouts ar with the knowledg s in Workforce Dev class-related activ tivities as well as v	ge and skills needed to velopment with Critical ities as assigned on a
	FINAL GRAD	COM (Completed) E OF FX: Students wal deadline may e	ertain developmental c is given in non-credit a who stop attending cla ither be dropped by the <" at the end of the sen	and continuing edu ss and do not with eir professor for ex	ucation courses. Indraw themselves prior accessive absences or
	classes will re performance.	ceive a grade of "F Logging into a DE o nat HCC will not dis	X at the end of the sen X", compared to an ear course without active p perse financial aid func	rned grade of "F" varticipation is seer	which is due to poor n as non-attending.

	<ul> <li>Students who receive financial aid but fail to attend class will be reported to the Department of Education and may have to pay back their aid. A grade of "FX" is treated exactly the same as a grade of "F" in terms of GPA, probation, suspension, and satisfactory academic progress.</li> <li>To compute grade point average (GPA), divide the total grade points by the total number of semester hours attempted. The grades "IP," "COM" and "I" do not affect GPA.</li> <li><i>Health Sciences Programs Grading Scales may differ from the approved HCC Grading Scale. For Health Sciences Programs Grading Scales, see the "Program Discipline Requirements" section of the Program's syllabi.</i></li> </ul>
Instructor Grading Criteria	Exams/AssignmentsPointsProject (Commercial Green Building Design) and Presentation)50Energy Analysis (Whole and Peak)10BPA10Mid-term Exam10Final Exam10Professionalism and Online Discussions10Total100
Scholastic Dishonesty	Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. College System Officials may initiate penalties and/or disciplinary proceedings against a student accused of scholastic dishonesty. "Scholastic dishonesty" includes, but is not limited to, cheating on a test, plagiarism, and collusion. "Cheating" on a test includes: Copying from another student's test paper; Using materials during a test that are not authorized by the person giving the test; Collaborating with another student during a test without authority; Knowingly using, buying, selling, stealing, transporting, or soliciting in whole or part the contents of an un-administered test; Bribing another person to obtain a test that is to be administered. "Plagiarism" means the misuse of another's work and the deliberate incorporation of that work into work you offer for credit. "Collusion" means the unauthorized collaboration with another person in preparing work offered for credit. Determination of scholastic dishonesty will be at the discretion of the instructor. For additional information reference the HCC Web site at: <a href="http://www.hccs.edu">http://www.hccs.edu</a>
HCC Policy Statement:	HCC ADA STATEMENT (Services to Students with Disabilities) Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the Disability Services Office at the respective college at the beginning of each semester. Faculty is authorized to provide only the accommodations requested by the Disability Support Services Office. For questions, please contact (713) 718-8397 or the Disability Counselor at your college. To visit the ADA Web site, please visit www.hccs.edu then click on Information for Students, scroll down the page and click on the words Disability Services.

Access Student Services Policies on their Web site:	http://www.hccs.edu/district/about-us/procedures/student-rights-policiesprocedures/
EGLS3 Evaluation for Greater Learning Student Survey System	At Houston Community College, professors believe that thoughtful student feedback is necessary to improve teaching and learning. During a designated time near the end of the term, you will be asked to answer a short online survey of research-based questions related to instruction. The anonymous results of the survey will be made available to your professors and department chairs for continual improvement of instruction. Look for the survey as part of the Houston Community College Student System online near the end of the term.
Distance Education	and/or Continuing Education Policies
Access DE Policies on their Web site:	http://de.hccs.edu/media/houston-community-college/distance-education/student-services/DE- Student-Handbook1.pdf
Access CE Policies on their Web site:	http://www.hccs.edu/continuing-education/students/financialaid/continuing-education/

"Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support. Furthermore, please notify the professor if you are comfortable in doing so."

The instructor reserves the right to modify the syllabus during the semester.