New York City College of Technology, CUNY

CURRICULUM MODIFICATION PROPOSAL FORM

This form is used for all curriculum modification proposals. See the [Proposal Classification Chart](http://openlab.citytech.cuny.edu/collegecouncil/files/2014/08/2013-10-09-Proposal_Classification_Chart.pdf) for information about what types of modifications are major or minor. Completed proposals should be emailed to the Curriculum Committee chair.

|  |  |
| --- | --- |
| **Title of Proposal** | **Bachelor of Technology with Strengthened Areas of Focus** |
| **Date** | **October 25, 2018** |
| **Major or Minor** | **Minor** |
| **Proposer’s Name** | **Alexander Aptekar** |
| **Department** | **Architectural technology** |
| **Date of Departmental Meeting in which proposal was approved** | **October 18, 2018** |
| **Department Chair Name** | **Sanjive Vaidya** |
| **Department Chair Signature and Date** |  |
| **Academic Dean Name** | **Kevin Hom** |
| **Academic Dean Signature and Date** |  |
| **Brief Description of Proposal**  (Describe the modifications contained within this proposal in a succinct summary. More detailed content will be provided in the proposal body. | To provide for more focused BTech degree this proposal provides the option for students to take 2 electives instead of ARCH 4710 Architectural Design Vll and take 2 electives instead of ARCH 4810 Architectural Design Vlll: Special Topics or ARCH 4830 Construction Technology: Special Topics. The proposal also includes changes in the prerequisites for ARCH 3550 Building Performance Workshop and ARCH 1212, Architectural Design ll: Foundations and Visual Studies. |
| **Brief Rationale for Proposal**  (Provide a concise summary of why this proposed change is important to the department. More detailed content will be provided in the proposal body). | These changes will strengthen the ability of the BTech students to focus their studies on areas of building technology. Among the focuses that these changes help facilitate include Computation/Fabrication, Sustainability & Resiliency, and Building Science & Technology. These changes will also differentiate the BTech and BArch degree students strengthening both the degrees.  A change in requirements in ARCH 3550 Building Performance Workshop will enable students to take the class as designed. The prerequisite ARCH 3670 was moved forward in the curriculum in May 2018. To align ARCH 3550 requirements with students learning paths a different prerequisite is being proposed.  A change in requirements ARCH 1212, Architectural Design ll: Foundations and Visual Studies. To address scheduling challenges and provide for more flexible sequence of classes. |
| **Proposal History**  (Please provide history of this proposal: is this a resubmission? An updated version? This may most easily be expressed as a list). | The BTech changes have been under development by the department, since the department began the process of creating the new five-year Bachelor of Architecture degree. It has been understood by the department and the department’s advisors that these BTech changes will be introduced after the BArch program begins to function. (The current third semester students may be eligible for the BArch program) |

**ALL PROPOSAL CHECK LIST**

|  |  |
| --- | --- |
| Completed CURRICULUM MODIFICATION FORM including: |  |
| * Brief description of proposal | √ |
| * Rationale for proposal | √ |
| * Date of department meeting approving the modification | √ |
| * Chair’s Signature |  |
| * Dean’s Signature |  |
| Evidence of consultation with affected departments  List of the programs that use this course as required or elective, and courses that use this as a prerequisite. | n/a |
| Documentation of Advisory Commission views (if applicable). | n/a |
| Completed [Chancellor’s Report Form](http://openlab.citytech.cuny.edu/collegecouncil/files/2014/08/2013-10-09-Chancellor_Report_Quick_Reference_Guide1.doc). | √ |

**EXISTING PROGRAM MODIFICATION PROPOSALS**

|  |  |
| --- | --- |
| Documentation indicating core curriculum requirements have been met for new programs/options or program changes. | √ |
| Detailed rationale for each modification (this includes minor modifications) | √ |

## Changes in Degree Programs

## Appendix H: CHANCELLOR’S UNIVERSITY REPORT DOCUMENTS

[“Section AIII: Changes in Degree” of the Programs Chancellor’s Report Forms]

The following revisions are proposed for the BACHELOR OF TECHNOLOGY IN ARCHITECTURAL TECHNOLOGY

|  |  |
| --- | --- |
| **FROM:** | **TO:** |
| **BTech candidates must complete the existing AAS in  ARCHITECTURAL TECHNOLOGY**  **PROGRAM-SPECIFIC DEGREE REQUIREMENTS 29-~~31~~**  BACCALAUREATE-LEVEL COURSES  ARCH 3512 Architectural Design V 5  ARCH 3522 History of New York City Architecture Met as GenEd / BTech Elective  ARCH 3612 Architectural Design Vl: Advanced Design  **or**  ARCH 3630 Advanced Detailing Studio 5  ARCH 4712 Architectural Design Vll: Urban Design 5  ARCH 4740 Detail and Construction Technologies for  Existing Buildings 3  ARCH 4812 Architectural Design Vlll: Integrative Design  **or**  ARCH 4830 Construction Technology: Special Topics 5  ARCH 4861 Professional Practice 3  ARCH 3531 Building Technology IV 3  ARCH 3670 Building Systems 3  **ELECTIVE COURSES IN THE MAJOR (BTECH ELECTIVE)** **3-~~6~~**  (no changes)  ELECTIVES  ARCH 3550 Building Performance Workshop 3  ARCH 3551 Sustainability: History and Practice 3  ARCH 3570 Lighting and Acoustics 3  ARCH 3590 Parametric Computation, Materials Fabrication 3 ARCH 3591 Computer assisted Architectural Animation 3  ARCH 3609 Integrated Software in the Architectural Office 3 ARCH 3631 Advance Material Workshop 3  ARCH 3640 Historic Preservation Theory and Practice 3 ARCH 3662 Government Regulations and Approvals 3 ARCH 3690 Intermediate Computation and Fabrication 3  ARCH 3691 Advanced Design and Building Information Modeling 3  ARCH 3900 Study Abroad 3  ARCH 4400 Special Topics in Architecture 3  ARCH 4709 Advanced 3D Modeling and Rendering 3  ARCH 4740 Detail and Construction of Existing Buildings 3  ARCH 4750 Advanced Simulation for High Performance Buildings 3  ARCH 4780 Case Studies in Structural Engineering 3  ARCH 4791 Advanced Design and Building Information  Modeling and Integrated Project Delivery 3  ARCH 4831 Design To Build 3  ARCH 4890 Computation and Fabrication: Performative Architecture 3  ARCH 4900 Internship in Architectural Technology 3  MAT 1475 Calculus I 4  FMGT 3620 Building Systems I 3  FMGT 4720 Building Systems II 3  FMGT 4780 Programming and Introduction to Space Planning 3  Students may use the following upper-level studios for elective credit with ~~department approval:~~  ~~ARCH 3610 Design VI 5~~  ARCH 3630 Advanced Detailing 5  ~~ARCH 4810 Design VIII 5~~  ARCH 4830 Construction Technology: Special Topics 5  Students may select one elective course outside the major to replace a BTech elective, with department approval.  **TOTAL PROGRAM-SPECIFIC REQUIRED AND ELECTIVE COURSES 78**  **TOTAL NYSED LIBERAL ARTS AND SCIENCE CREDITS**   **42**  **TOTAL CREDITS REQUIRED FOR THE DEGREE**  **120**  For progression in and graduation from this Architectural Technology program, a minimum grade of “C” is required in the following courses in the major: all required Design and Construction Technology Studios (ARCH 1112, ARCH 1212, ARCH 2312, ARCH 2412, ARCH 3512, ARCH 3612, ARCH 3630, ARCH 4712, ARCH 4812 and ARCH 4830), and all required Visual Studies (ARCH 1191, ARCH 1291) and Building Technology courses (ARCH 1231, ARCH 2331, ARCH 2431, ARCH 3531).  Students may not enroll in multiple studios concurrently, i.e. students may enroll in only one course per semester from the following list: ARCH 3512, ARCH 3612, ARCH 3630, ARCH 4712, ARCH 4812, ARCH 4830. | **BTech candidates must complete the existing AAS in  ARCHITECTURAL TECHNOLOGY**  **PROGRAM-SPECIFIC DEGREE REQUIREMENTS 29-33**  BACCALAUREATE-LEVEL COURSES  ARCH 3512 Architectural Design V 5  ARCH 3522 History of New York City Architecture Met as GenEd / BTech Elective  ARCH 3612 Architectural Design Vl: Advanced Design  **or**  ARCH 3630 Advanced Detailing Studio 5  ARCH 4712 Architectural Design Vll: Urban Design 5  o**r**  Two Elective Courses in The Major 5-6  ARCH 4740 Detail and Construction Technologies for  Existing Buildings 3  ARCH 4812 Architectural Design Vlll: Integrative Design  **or**  ARCH 4830 Construction Technology: Special Topics 5  o**r**  Two Elective Courses in The Major 5-6  ARCH 4861 Professional Practice 3  ARCH 3531 Building Technology IV 3  ARCH 3670 Building Systems 3  **ELECTIVE COURSES IN THE MAJOR (BTECH ELECTIVE)** **3-18**  (no changes)  ELECTIVES  ARCH 3550 Building Performance Workshop 3  ARCH 3551 Sustainability: History and Practice 3  ARCH 3570 Lighting and Acoustics 3  ARCH 3590 Parametric Computation, Materials Fabrication 3 ARCH 3591 Computer assisted Architectural Animation 3  ARCH 3609 Integrated Software in the Architectural Office 3 ARCH 3631 Advance Material Workshop 3  ARCH 3640 Historic Preservation Theory and Practice 3 ARCH 3662 Government Regulations and Approvals 3 ARCH 3690 Intermediate Computation and Fabrication 3  ARCH 3691 Advanced Design and Building Information Modeling 3  ARCH 3900 Study Abroad 3  ARCH 4400 Special Topics in Architecture 3  ARCH 4709 Advanced 3D Modeling and Rendering 3  ARCH 4722 Theory I: Principles and Theories of Architecture 3  ARCH 4740 Detail and Construction of Existing Buildings 3  ARCH 4750 Advanced Simulation for High Performance Buildings 3  ARCH 4780 Case Studies in Structural Engineering 3  ARCH 4781 Architectural Structures 3: Structural Systems 3  ARCH 4791 Advanced Design and Building Information  ARCH 4822 Theory II: Architectural Theory Applied 3  ARCH 4831 Design To Build 3  ARCH 4890 Computation and Fabrication: Performative Architecture 3  ARCH 4900 Internship in Architectural Technology 3  Modeling and Integrated Project Delivery 3  MAT 1475 Calculus I 4  FMGT 3620 Building Systems I 3  FMGT 4720 Building Systems II 3  FMGT 4780 Programming and Introduction to Space Planning 3  Students may use the following upper-level studios for elective credit:  ARCH 3612 Architectural Design Vl: Advanced Design 5  ARCH 3630 Advanced Detailing 5  ARCH 4712 Architectural Design Vll: Urban Design 5  ARCH 4812 Architectural Design Vlll: Integrative Design 5  ARCH 4830 Construction Technology: Special Topics 5  Students may select one elective course outside the major to replace a BTech elective, with department approval.  **TOTAL PROGRAM-SPECIFIC REQUIRED AND ELECTIVE COURSES**  **78**  (no change)  **TOTAL NYSED LIBERAL ARTS AND SCIENCE CREDITS**   **42**  (no change) **TOTAL CREDITS REQUIRED FOR THE DEGREE**  **120**  (no change)  For progression in and graduation from this Architectural Technology program, a minimum grade of “C” is required in the following courses in the major: all required Design and Construction Technology Studios (ARCH 1112, ARCH 1212, ARCH 2312, ARCH 2412, ARCH 3512, ARCH 3612, ARCH 3630, ARCH 4712, ARCH 4812 and ARCH 4830), and all required Visual Studies (ARCH 1191, ARCH 1291) and Building Technology courses (ARCH 1231, ARCH 2331, ARCH 2431, ARCH 3531).  Students may not enroll in multiple studios concurrently, i.e. students may enroll in only one course per semester from the following list: ARCH 3512, ARCH 3612, ARCH 3630, ARCH 4712, ARCH 4812, ARCH 4830. |

**Rationale:**

These changes are part of a strengthening and adapting of the architecture curriculum to meet the evolving requirements of the discipline. The architecture profession has been moving towards either requiring higher levels of degrees or higher levels of specialization. To address this the department is in process of introducing a five-year Bachelor of Architecture degree. [Approved by College Council on May 8, 2018, granted “Candidacy Status” by the National Architectural Accrediting Board, Final accreditation will be awarded or denied in 2023. (Students graduating the program in spring 2022 will be eligible to receive a degree if the program is awarded accreditation in 2023.] The above proposed changes will broaden the opportunity for BTech students to take elective classes that will focus on architectural technology. Technology focuses, or tracks that are available with the existing electives for BTech students include; Digital Representation, Computation/Fabrication, Historic Preservation, Forensics & Conservation, Sustainability & Resiliency, Project Management and, Building Science & Technology. These changes will also differentiate the BTech and BArch degree students strengthening both the degrees by allowing students to concentrate on their area of specialization with colleagues with similar areas of interest. Industry and academic advisors to the program have advocated this change to differentiate the programs during the advisement for the development of the Barch program.

**Course changes to be offered in the Architectural Technology department**

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| --- | --- | --- | --- |
| **CUNYFirst Course ID** | ARCH 3550 |  |  |
| **FROM:** |  | **TO:** |  |
| **Department(s)** | Architecture Technology | **Department(s)** | Architecture Technology |
| **Course** | ARCH 3550 Building Performance Workshop | **Course** | ARCH 3550 Building Performance Workshop |
| **Prerequisite** | (ARCH 1250 and ~~ARCH 3670~~) or  (CMCE 1222 and ~~CMCE 2320~~) | **Prerequisite** | (ARCH 1250 and ARCH 2431) or (CMCE 1222 and CMCE 2321) |
| **Corequisite** | none | **Corequisite** | none |
| **Pre- or corequisite** | none | **Pre- or corequisite** | none |
| **Hours** | 1 cl hr, 4 lab hrs | **Hours** | 1 cl hr, 4 lab hrs |
| **Credits** | 3 | **Credits** | 3 |
| **Description** | (no change) | **Description** | (no change) |
| **Requirement Designation** |  | **Requirement Designation** |  |
| **Liberal Arts** | [ ] Yes [ ] No | **Liberal Arts** | [ ] Yes [ ] No |
| **Course Attribute (e.g. Writing Intensive, Honors, etc** |  | **Course Attribute (e.g. Writing Intensive, Honors, etc** |  |
| **Course Applicability** | |  | | --- | | [ x] Major | | [ ] Gen Ed Required | | [ ] English Composition | | [ ] Mathematics | | [ ] Science | | [ ] Gen Ed - Flexible | | [ ] World Cultures | | [ ] US Experience in its Diversity | | [ ] Creative Expression | | [ ] Individual and Society | | [ ] Scientific World | | [ ] Gen Ed - College Option | | [ ] Speech | | [ ] Interdisciplinary | | [ ] Advanced Liberal Arts | | **Course Applicability** | |  | | --- | | [x ] Major | | [ ] Gen Ed Required | | [ ] English Composition | | [ ] Mathematics | | [ ] Science | | [ ] Gen Ed - Flexible | | [ ] World Cultures | | [ ] US Experience in its Diversity | | [ ] Creative Expression | | [ ] Individual and Society | | [ ] Scientific World | | [ ] Gen Ed - College Option | | [ ] Speech | | [ ] Interdisciplinary | | [ ] Advanced Liberal Arts | |
| **Effective Term** | Spring 2019 |  |  |

**Rationale:** The change in requirements of for ARCH 3550 Building Performance Workshop will enable students to take the class as it is designed to integrate into students’ academic advancement. The prerequisite ARCH 3670 was moved forward in the curriculum to strengthen the degree offerings including the new five-year Bachelor of Architecture degree. [Approved by College Council on May 8, 2018]. To adjust to the May 8 curriculum changes it is proposed that the replacement requirement ARCH 3670 be ARCH 2431 Building Technology III.

|  |  |  |  |
| --- | --- | --- | --- |
| **CUNYFirst Course ID** | ARCH 1212 |  |  |
| **FROM:** |  | **TO:** |  |
| **Department(s)** | Architecture Technology | **Department(s)** | Architecture Technology |
| **Course** | ARCH 1212, Architectural Design ll: Foundations and Visual Studies | **Course** | ARCH 1212, Architectural Design ll: Foundations and Visual Studies |
| **Prerequisite** | ~~ARCH 1101 and (ARCH 1112 with a grade of C or higher OR (ARCH 1110 and ARCH 1191 with a grade of C or higher))~~ | **Prerequisite** | ARCH 1112 with a grade of C or higher OR (ARCH 1110 and ARCH 1191 with a grade of C or higher) |
| **Corequisite** | none | **Corequisite** | none |
| **Pre- or corequisite** | MAT 1275 or higher Equivalent to ARCH 1210 + ARCH 1291 | **Pre- or corequisite** | ARCH 1101 and (ARCH 1112 with a grade of C or higher OR (ARCH 1110 and ARCH 1191 with a grade of C or higher)) and MAT 1275 or higher Equivalent to ARCH 1210 + ARCH 1291 |
| **Hours** | 1 cl hrs, 8 lab Hours | **Hours** | 1 cl hrs, 8 lab Hours |
| **Credits** | 5 | **Credits** | 5 |
| **Description** | (no change) | **Description** | (no change) |
| **Requirement Designation** |  | **Requirement Designation** |  |
| **Liberal Arts** | [ ] Yes [ ] No | **Liberal Arts** | [ ] Yes [ ] No |
| **Course Attribute (e.g. Writing Intensive, Honors, etc** |  | **Course Attribute (e.g. Writing Intensive, Honors, etc** |  |
| **Course Applicability** | |  | | --- | | [ x] Major | | [ ] Gen Ed Required | | [ ] English Composition | | [ ] Mathematics | | [ ] Science | | [ ] Gen Ed - Flexible | | [ ] World Cultures | | [ ] US Experience in its Diversity | | [ ] Creative Expression | | [ ] Individual and Society | | [ ] Scientific World | | [ ] Gen Ed - College Option | | [ ] Speech | | [ ] Interdisciplinary | | [ ] Advanced Liberal Arts | | **Course Applicability** | |  | | --- | | [x ] Major | | [ ] Gen Ed Required | | [ ] English Composition | | [ ] Mathematics | | [ ] Science | | [ ] Gen Ed - Flexible | | [ ] World Cultures | | [ ] US Experience in its Diversity | | [ ] Creative Expression | | [ ] Individual and Society | | [ ] Scientific World | | [ ] Gen Ed - College Option | | [ ] Speech | | [ ] Interdisciplinary | | [ ] Advanced Liberal Arts | |
| **Effective Term** | Spring 2019 |  |  |

**Rationale:** To address room availability and scheduling challenges a few students are unable to take the intro course in the remedied sequence. To support these and transfer students’ needs the proposed above requirement changes will provide for more flexible sequence of classes.