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.

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| **Title of Proposal** | **New Concentrations for BTech and BArch Programs** |
| **Date** | **December 12, 2024** |
| **Major or Minor** | **Major** |
| **Proposer’s Name** | **Shelley Smith** |
| **Department** | **Architectural Technology** |
| **Date of Departmental Meeting in which proposal was approved** | **19 January 2023; 12 December 2024** |
| **Department Chair Name** | **Sanjive Vaidya** |
| **Department Chair Signature and Date** | **A black line in a white background  Description automatically generated12/12/24** |
| **Academic Dean Name** | **Hong Li** |
| **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. | **Concentrations for BTech and BArch degree programs** |
| **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).  | * **Raise student awareness of important focus areas in demand in the industry**
* **Provide students with the option to specialize in an area of interest**
* **Improve career readiness**
 |
| **Proposal History**(Please provide history of this proposal: is this a resubmission? An updated version? This may most easily be expressed as a list). | **None** |

Please include all appropriate documentation as indicated in the Curriculum Modification Checklist.

For each new course, please also complete the New Course Proposal and submit in this document.

Please submit this document as a single .doc or .rtf format. If some documents are unable to be converted to .doc, then please provide all documents archived into a single .zip file.

**ALL PROPOSAL CHECK LIST**

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| 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 departmentsList 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**

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

**Description of Proposal**

This proposal creates Concentrations for students in the Bachelor of Technology in Architectural Technology and the Bachelor of Architecture degree programs. These Concentrations are aligned with current technologies and industry practice, and with concentrations/specializations offered in other institutions of higher education. The department curriculum committee has periodically surveyed the curricula of other accredited programs and finds it is increasingly common to offer concentrations and certificate programs at both the graduate level and in undergraduate programs at peer institutions. Due to curriculum changes implemented in 2016 in our BTech program and due to the number of discipline electives required in the new BArch program, we are able to fill the seats in a wider range of discipline electives. This makes the implementation of Concentrations realistic. BTech students take a minimum of 14 to 15 discipline elective credits and BArch students take 18 discipline elective credits.

Bachelor of Technology in Architectural Technology

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| **FROM** | **TO** |
| **GENERAL EDUCATION FLEXIBLE COMMON CORE AND COLLEGE OPTION REQUIREMENTS** (same)**PROGRAM-SPECIFIC DEGREE REQUIREMENTS** (same)**PROGRAM SPECIFIC ELECTIVES**Choose 10-15 credits as needed to reach 92 credits in the Major:ARCH 2210ID Information Design Theories 3ARCH 3509 Media and Representation I 3ARCH 3550 Building Performance Workshop 3 ARCH 3551 Sustainability: History and Practice 3 ARCH 3570 Lighting and Acoustics in Architecture 3 ARCH 3590 Parametric Computation, Materials and Fabrication 3 ARCH 3609 Media and Representation II 3 ARCH 3622 Japanese Architecture 3 ARCH 3630 Advanced Detailing Studio 5 ARCH 3631 Advanced Materials 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 Architecture Study Abroad 3 ARCH 4400 Special Topics in Architecture 3 ARCH 4709 Advanced 3-Dimensional Modeling and Rendering 3 ARCH 4712 Architectural Design VII: Urban Design 5ARCH 4722 Theory I: Principles and Theories of Architecture 3ARCH 4740 Detail and Construction Technologies for Existing Buildings 3 ARCH 4750 Advanced Simulation for High Performance Buildings 3 ARCH 4780 Case Studies in Structural Engineering 3 ARCH 4781 Structures III: Structural Systems 3ARCH 4791 Advanced Design and Building Information Modeling and Integrated Project Delivery 3 ARCH 4822 Theory II: Architectural Theory Applied 3ARCH 4831 Design to Build 3 ARCH 4890 Computation and Fabrication: Performative Architecture 3 ARCH 4900 Internship in Architectural Technology 3MAT 1475 Calculus I 4FMGT 3620 Building Systems I 3FMGT 4720 Building Systems II 3FMGT 4780 Programming and Introduction to Space Planning 3 | **GENERAL EDUCATION FLEXIBLE COMMON CORE AND COLLEGE****OPTION REQUIREMENTS** (same)**PROGRAM-SPECIFIC DEGREE REQUIREMENTS** (same)**PROGRAM SPECIFIC ELECTIVES** Choose one Concentration:Sustainability & Building PerformanceARCH 3550 Building Performance Workshop 3 ARCH 3630 Advanced Detailing Studio 5 ARCH 4750 Advanced Simulation for High Performance Buildings 3 Choose one: ARCH 3551, ARCH 3570, ECON 2505ID, ESCI 1110, ESCI 1210, ESCI 2000ID, GEOG 1101, PHYS 1002ID 3Materials, Fabrication & DetailingARCH 3590 Parametric Computation, Materials and Fabrication 3 ARCH 3630 Advanced Detailing Studio 5 Choose two: ARCH 3631, 3690, 4740, 4780, 4781, 4831, 4890; CMCE 2306 Materials Testing Laboratory, CMCE 3501 Steel Fabrication Detailing 6Project DeliveryARCH 3662 Government Regulations and Approvals 3 ARCH 3691 Advanced Design and Building Information Modeling 3 CMCE 2321 Foundations of Construction Management 3Choose one: ARCH 3630, 4831; CMCE 2412 Construction Estimating, CMCE 2421 Planning & Scheduling 2-5Historic PreservationARCH 3640 Historic Preservation: Theory and Practice 3ARCH 4740 Detail and Construction Technologies for Existing Buildings 3 Choose two: ARCH 3550, 3551, 3630, 3631, 3662, 4780 6-8Architectural TechnologyChoose 10-15 credits as needed to reach 92 credits in the Major:ARCH 2210ID Information Design Theories 3ARCH 3509 Media and Representation I 3ARCH 3550 Building Performance Workshop 3 ARCH 3551 Sustainability: History and Practice 3 ARCH 3570 Lighting and Acoustics in Architecture 3 ARCH 3590 Parametric Computation, Materials and Fabrication 3 ARCH 3609 Media and Representation II 3 ARCH 3622 Japanese Architecture 3 ARCH 3630 Advanced Detailing Studio 5 ARCH 3631 Advanced Materials 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 Architecture Study Abroad 3 ARCH 4400 Special Topics in Architecture 3 ARCH 4709 Advanced 3-Dimensional Modeling and Rendering 3 ARCH 4712 Architectural Design VII: Urban Design 5ARCH 4722 Theory I: Principles and Theories of Architecture 3ARCH 4740 Detail and Construction Technologies for Existing Buildings 3 ARCH 4750 Advanced Simulation for High Performance Buildings 3 ARCH 4780 Case Studies in Structural Engineering 3 ARCH 4781 Structures III: Structural Systems 3ARCH 4791 Advanced Design and Building Information Modeling and Integrated Project Delivery 3 ARCH 4822 Theory II: Architectural Theory Applied 3ARCH 4831 Design to Build 3 ARCH 4890 Computation and Fabrication: Performative Architecture 3 ARCH 4900 Internship in Architectural Technology 3MAT 1475 Calculus I 4FMGT 3620 Building Systems I 3FMGT 4720 Building Systems II 3FMGT 4780 Programming and Introduction to Space Planning 3Design Your Own ConcentrationSpeak to an advisor to design your own Concentration |

Effective Spring 2026

Bachelor of Architecture

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| **FROM** | **TO** |
| **GENERAL EDUCATION FLEXIBLE COMMON CORE AND COLLEGE OPTION REQUIREMENTS** (same)**PROGRAM-SPECIFIC DEGREE REQUIREMENTS**(same)**PROGRAM SPECIFIC ELECTIVES**Choose 15 elective credits from the list of courses below:ARCH 2210ID Information Design Theories 3ARCH 3509 Media and Representation I 3ARCH 3550 Building Performance Workshop 3 ARCH 3551 Sustainability: History and Practice 3 ARCH 3570 Lighting and Acoustics in Architecture 3 ARCH 3590 Parametric Computation, Materials and Fabrication 3 ARCH 3609 Media and Representation II 3 ARCH 3622 Japanese Architecture 3 ARCH 3630 Advanced Detailing Studio 5 ARCH 3631 Advanced Materials 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 Architecture Study Abroad 3 ARCH 4400 Special Topics in Architecture 3 ARCH 4709 Advanced 3-Dimensional Modeling and Rendering 3 ARCH 4740 Detail and Construction Technologies for 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 | **GENERAL EDUCATION FLEXIBLE COMMON CORE AND COLLEGE OPTION REQUIREMENTS** (same)**PROGRAM-SPECIFIC DEGREE REQUIREMENTS** (same)**PROGRAM SPECIFIC ELECTIVES** Choose one Concentration:Sustainability & Building PerformanceARCH 3550 Building Performance Workshop 3 ARCH 3630 Advanced Detailing Studio 5 ARCH 4750 Advanced Simulation for High Performance Buildings 3 Choose one: ARCH 3551, ARCH 3570, ECON 2505ID, ESCI 1110, ESCI 1210, ESCI 2000ID, GEOG 1101, PHYS 1002ID 3Materials, Fabrication & DetailingARCH 3590 Parametric Computation, Materials and Fabrication 3 ARCH 3630 Advanced Detailing Studio 5 Choose two: ARCH 3631, 3690, 4740, 4780, 4781, 4831, 4890; CMCE 2306 Materials Testing Laboratory, CMCE 3501 Steel Fabrication Detailing 6Project DeliveryARCH 3662 Government Regulations and Approvals 3 ARCH 3691 Advanced Design and Building Information Modeling 3 CMCE 2321 Foundations of Construction Management 3Choose one: ARCH 3630, 4831; CMCE 2412 Construction Estimating, CMCE 2421 Planning & Scheduling 2-5Historic PreservationARCH 3640 Historic Preservation: Theory and Practice 3ARCH 4740 Detail and Construction Technologies for Existing Buildings 3 Choose two: ARCH 3550, 3551, 3630, 3631, 3662, 4780 6-8Architectural TechnologyChoose 15 elective credits from the list of courses below:ARCH 2210ID Information Design Theories 3ARCH 3509 Media and Representation I 3ARCH 3550 Building Performance Workshop 3 ARCH 3551 Sustainability: History and Practice 3 ARCH 3570 Lighting and Acoustics in Architecture 3 ARCH 3590 Parametric Computation, Materials and Fabrication 3 ARCH 3609 Media and Representation II 3 ARCH 3622 Japanese Architecture 3 ARCH 3630 Advanced Detailing Studio 5 ARCH 3631 Advanced Materials 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 Architecture Study Abroad 3 ARCH 4400 Special Topics in Architecture 3 ARCH 4709 Advanced 3-Dimensional Modeling and Rendering 3 ARCH 4740 Detail and Construction Technologies for 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 3Design Your Own ConcentrationSpeak to an advisor to design your own Concentration |

Effective Spring 2026

**Rationale**

These Concentrations will prepare graduates with formally documented skills that will enhance employability as they move into the workforce. As the design and construction fields become increasingly complex, the ability to demonstrate an area of focused skills and knowledge will make our graduates more competitive with graduates from elite schools. Equally important, the implementation of Concentrations will raise awareness among students and mitigate the tendency to choose electives based only on schedule. Students will be prompted to understand the different areas of knowledge required of a well-rounded professional, consider the wide range of opportunities in architectural and adjacent fields beyond “traditional” architectural practice, and explore their individual interests.