

**ANKARA YILDIRIM BEYAZIT UNIVERSITY
FACULTY OF ARCHITECTURE AND FINE ARTS
DEPARTMENT OF ARCHITECTURE**

ARCH 302 ARCHITECTURAL DESIGN STUDIO II FALL 2026-2027

CONVERGENCE

INTERNATIONAL CONGRESS AND EXHIBITION CENTER

“Architecture for Gathering, Exchange and Urban Interaction”

International congress and exhibition centers are complex public buildings where large numbers of people, diverse activities, flexible spatial requirements, infrastructure and urban movement converge.

Unlike buildings organized around a single function or user group, congress and exhibition centers must accommodate multiple events occurring simultaneously. Congress participants, exhibition visitors, speakers, organizers, staff, service personnel, exhibitors, suppliers and visitors may use the complex through different routes, at different times and with different levels of access.

CONVERGENCE approaches the congress and exhibition center not simply as a collection of large halls, but as an integrated architectural and urban system.

Students are expected to investigate how large public spaces, congress halls, exhibition areas, meeting facilities, foyers, circulation systems, service infrastructure and public open spaces can form a coherent architectural environment.

The project requires design decisions at multiple scales, ranging from urban strategy and site organization to large span structures, public interiors and architectural detail.

Particular emphasis will be placed on public space, crowd movement, flexible use, large span structural systems, service logistics, acoustic requirements, environmental performance and the relationship between architecture and the surrounding city.

ARCH 401 aims to develop students' ability to independently manage a complex architectural problem and integrate spatial, structural, environmental, functional and urban decisions into a comprehensive architectural proposal.

Project Site

The project site is located adjacent to the MTA Museum in Ankara and encompasses the area currently occupied by Arı College, Evrensel College and Çankaya University 100. Yıl Campus.

For the purposes of the studio, the entire designated area will be considered as the project site for the proposed International Congress and Exhibition Center.

The scale and location of the site provide an opportunity to investigate the project not only as a large public building, but also as a new urban destination capable of establishing relationships with its surrounding cultural, educational and recreational environment.

The proximity of the MTA Museum constitutes an important contextual condition. Students are expected to investigate how the proposed congress and exhibition center may establish spatial, visual and public relationships with the museum and the wider urban environment.

Particular attention should be given to:

- Relationship with the MTA Museum

- Wider urban connections
- Existing pedestrian movement
- Public transportation connections
- Main visitor arrival routes
- Vehicle access
- Bus and taxi arrival
- VIP access
- Exhibition and service vehicle access
- Loading and unloading operations
- Emergency access
- Topography
- Existing landscape and vegetation
- Important views and visual axes
- Building scale and massing
- Public open space opportunities
- Landscape continuity
- Relationships between indoor and outdoor event spaces
- Connections between the project and surrounding urban activities

Students are expected to develop a comprehensive site strategy before determining the final architectural form of the complex. Building placement, public spaces, landscape, pedestrian movement, vehicle circulation and service logistics should therefore be considered as integral components of the architectural design.

Studio Objectives

The studio aims to develop students' ability to address a large scale and complex architectural problem through an integrated design process.

Students are expected to:

- Understand congress and exhibition centers as complex public building types
- Develop an architectural strategy responding to the wider urban context
- Organize large numbers of users with different access requirements
- Integrate congress, exhibition and supporting functions within a coherent architectural system
- Develop clear relationships between public, controlled and service areas
- Design flexible spaces capable of supporting different event scenarios

- Develop appropriate crowd circulation strategies
- Separate and coordinate visitor, staff, VIP and service circulation
- Understand exhibition logistics as part of architectural design
- Develop large span structural strategies appropriate to congress and exhibition spaces
- Integrate acoustic requirements into auditorium and congress hall design
- Develop coherent relationships between structure, space and architectural form
- Integrate environmental considerations into massing, orientation and building envelope decisions
- Develop public open spaces as integral components of the project
- Address accessibility, evacuation and emergency movement as architectural design parameters
- Integrate technical and service infrastructure into the architectural proposal
- Develop architectural decisions across urban, building, hall and detail scales
- Demonstrate increasing independence in architectural decision making
- Communicate a complex architectural proposal through drawings, diagrams, models and presentations

Learning Outcomes

Upon successful completion of the studio, students are expected to be able to:

- Define a complex public building as an architectural and urban design problem
- Develop an architectural program involving multiple user groups and simultaneous activities
- Translate urban and contextual analysis into architectural decisions
- Establish a coherent hierarchy between public, controlled, private and service spaces
- Develop circulation systems appropriate to large public buildings
- Organize large visitor flows and gathering spaces
- Develop independent circulation systems for visitors, staff, VIP users and service operations
- Design flexible congress and exhibition spaces
- Develop appropriate large span structural systems
- Integrate acoustic requirements into architectural space
- Organize exhibition loading, installation and service operations
- Integrate structural, circulation and technical systems into architectural design
- Develop public open spaces that contribute to the urban environment
- Respond to environmental conditions through architectural form and building envelope decisions

- Coordinate architectural decisions at multiple scales
 - Develop a coherent architectural language appropriate to a major public building
 - Demonstrate an independent architectural position supported by analysis and design decisions
 - Communicate architectural ideas clearly through advanced architectural representation
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Architectural Program

The architectural program serves as a guiding framework.

Students are expected to interpret and reorganize the program according to their architectural concepts, site strategies and event scenarios.

The congress and exhibition center should not be approached as a collection of independent halls. The relationship between congress spaces, exhibition areas, circulation, public spaces, service logistics and the city should form the basis of the architectural proposal.

1. Main Arrival and Public Spaces

- Main entrance
- Entrance plaza
- Information and reception
- Registration areas
- Main foyer
- Gathering spaces
- Waiting areas
- Cloakroom
- Public toilets
- Public circulation areas

The entrance sequence should accommodate large numbers of users and establish a clear relationship between the building and public urban space.

2. Congress Center

The congress component should include:

- Main congress hall
- Secondary conference halls
- Meeting rooms
- Seminar rooms

- Workshop rooms
- Speaker preparation rooms
- Translation and interpretation facilities where required
- Control rooms
- Technical support spaces
- Pre function areas
- Foyers

The main congress hall should be developed with particular attention to:

- Capacity
- Visibility
- Acoustics
- Stage organization
- Audience circulation
- Emergency evacuation
- Structural system
- Technical infrastructure

3. Exhibition Center

The exhibition component should include:

- Main exhibition halls
- Flexible exhibition spaces
- Exhibition entrance areas
- Exhibition foyers
- Temporary exhibition areas where appropriate
- Storage
- Preparation areas
- Service corridors
- Loading and unloading areas

Exhibition halls should provide flexible spatial configurations capable of accommodating different exhibition layouts.

4. Multi Purpose Event Spaces

Possible spaces may include:

- Multi purpose hall
- Banquet hall
- Reception hall
- Social event spaces
- Flexible meeting spaces

These spaces may operate independently or in connection with congress and exhibition activities.

5. VIP and Protocol Spaces

- VIP entrance where appropriate
- VIP lounge
- Protocol reception spaces
- Private meeting rooms
- Controlled circulation

VIP circulation should be integrated without interfering with general public and service movement.

6. Food and Beverage Spaces

- Restaurants
- Cafés
- Food courts where appropriate
- Catering support
- Main kitchen
- Preparation areas
- Storage
- Service circulation

Food and beverage facilities should support both normal daily use and large event conditions.

7. Administration and Staff Spaces

- Management offices
- Event administration

- Meeting rooms
- Staff offices
- Staff changing rooms
- Staff rest areas
- Staff dining areas
- Security
- Control rooms

8. Service and Exhibition Logistics

Service organization is a fundamental component of the architectural design.

Students should develop:

- Service entrances
- Loading docks
- Exhibition truck access
- Goods receiving areas
- Temporary storage
- Exhibition preparation areas
- Waste management
- Service corridors
- Freight elevators where necessary
- Maintenance spaces
- Back of house circulation

Service operations should allow exhibitions to be installed and removed without interfering with public circulation.

9. Technical Spaces

- Mechanical rooms
- Electrical rooms
- Fire safety spaces
- Technical control areas
- Vertical service shafts

- Equipment rooms
- Building management systems

Technical infrastructure should be integrated into the project from the early stages of the design process.

10. Public Open Spaces and Landscape

The project should contribute to the surrounding urban environment through meaningful public spaces.

Possible components may include:

- Public plaza
- Event square
- Outdoor exhibition spaces
- Landscaped gathering areas
- Pedestrian routes
- Courtyards
- Terraces
- Semi open spaces
- Outdoor event areas
- Connections with surrounding landscape

Public open spaces should remain meaningful parts of the project even when major events are not taking place.

11. Vehicle Access and Parking

Students should develop coherent strategies for:

- Visitor vehicle access
- Public transportation connections
- Taxi and transfer vehicles
- Bus arrival and parking
- VIP access
- Staff access
- Exhibition vehicles
- Loading trucks
- Emergency vehicles

- Parking

Public and service traffic should be clearly organized and coordinated with pedestrian circulation.

STAGE 1

Preliminary Work

Reading Event Architecture, Urban Context and Complex Systems

This stage establishes the analytical and conceptual foundation of the project.

Students are expected to investigate congress and exhibition centers through precedent studies, program analysis, user scenarios, structural systems and detailed site analysis.

a. Case Studies

Students should analyze significant international and national examples of congress and exhibition centers.

Each case study should investigate:

- Urban relationship
- Building organization
- Program distribution
- Congress hall organization
- Exhibition hall organization
- Public spaces
- Foyer systems
- Circulation
- Crowd movement
- VIP circulation
- Staff circulation
- Service circulation
- Exhibition logistics
- Loading systems
- Large span structure
- Acoustic strategies

- Building envelope
- Environmental strategies
- Public open spaces

Case studies should be communicated primarily through architectural diagrams, plans, sections and analytical drawings.

b. Program and Event Scenario Analysis

Students should investigate different operating conditions such as:

- International congress
- Large exhibition
- Multiple simultaneous congresses
- Exhibition and congress operating simultaneously
- Banquet or reception
- Public cultural event
- Exhibition installation
- Exhibition dismantling

Different event scenarios should be translated into architectural circulation and functional diagrams.

c. User and Circulation Analysis

Students should investigate the movement of:

- Congress participants
- Exhibition visitors
- Speakers
- VIP users
- Organizers
- Staff
- Catering personnel
- Exhibition personnel
- Service personnel
- Delivery vehicles
- Emergency users

Students should identify where these flows should intersect and where they should remain separated.

d. Structural System Research

Students should investigate structural strategies appropriate to large span spaces.

Research should include:

- Large span trusses
- Space frame systems
- Long span beam systems
- Shell systems where appropriate
- Structural grids
- Relationship between structural system and architectural form

The purpose is not structural calculation but the development of a credible architectural and structural strategy.

e. Site Analysis

Students should investigate:

- Wider urban context
- Surrounding educational institutions
- MTA Museum
- Kaplan Çansera
- Existing transportation systems
- Public transportation
- Pedestrian movement
- Vehicle movement
- Event related traffic
- Building heights
- Urban scale
- Topography
- Orientation
- Views
- Noise

- Existing vegetation
- Landscape relationships
- Potential public connections
- Service access possibilities

f. Site Model

Scale: 1/1000 or 1/500

The model should demonstrate:

- Project site
- Surrounding urban fabric
- Major buildings
- Roads
- Public spaces
- Topography
- Significant landscape elements

STAGE 2

Conceptual Design

From Urban Strategy to Complex Architectural Organization

At this stage students are expected to transform their analyses into an integrated architectural strategy.

Design decisions should operate simultaneously at the following scales:

City

Site

Building

Hall

Structural System

a. Urban Strategy

Students should develop:

- Relationship with surrounding institutions
- Main pedestrian approaches

- Public transportation connections
- Main public entrance
- Urban plaza
- Landscape strategy
- Building placement
- Building height
- Mass and void relationships
- Public open spaces
- Vehicle organization

b. Program Organization

Students should establish clear relationships between:

- Congress functions
- Exhibition functions
- Public spaces
- Multi purpose spaces
- Food and beverage
- VIP spaces
- Administration
- Service spaces
- Technical infrastructure

c. Circulation Strategy

Students should develop coordinated circulation systems for:

- General public
- Congress participants
- Exhibition visitors
- VIP users
- Staff
- Service personnel

- Exhibition logistics
- Emergency evacuation

d. Large Hall Studies

Students should investigate:

- Congress hall geometry
- Exhibition hall dimensions
- Structural spans
- Audience organization
- Visibility
- Acoustics
- Flexible use
- Stage organization
- Exhibition layout
- Hall access
- Emergency exits

e. Site Plan

Scale: 1/500

The site plan should demonstrate:

- Building placement
- Main entrances
- Public plaza
- Landscape
- Pedestrian circulation
- Vehicle circulation
- Bus movement
- Service access
- Loading areas
- Emergency access

- Relationship with surrounding urban context

f. Building Plans

Scale: 1/200

Plans should demonstrate:

- Main functional organization
- Public circulation
- Congress spaces
- Exhibition spaces
- Foyers
- Service areas
- Loading areas
- Vertical circulation
- Structural logic

g. Architectural Sections

Scale: 1/200

Sections should demonstrate:

- Spatial relationships between major functions
- Large hall volumes
- Foyers
- Vertical circulation
- Structural depth
- Natural light
- Relationship between building and ground

h. Concept and Structural Models

Models should investigate:

- Overall massing
- Large span spaces
- Structural concept

- Public open spaces
- Relationship between building and landscape

STAGE 3

Final Design

Architecture as an Integrated Complex System

At this stage students are expected to develop the project as a comprehensive architectural proposal integrating urban, spatial, structural, environmental and technical decisions.

a. Site Plan

Scale: 1/500

The site plan should demonstrate:

- Urban strategy
- Building placement
- Public spaces
- Landscape
- Pedestrian movement
- Public transportation connections
- Vehicle movement
- Bus circulation
- VIP access
- Service circulation
- Exhibition truck access
- Loading areas
- Parking
- Emergency access

b. Floor Plans

Scale: 1/200

Students should present all significant levels.

Plans should demonstrate:

- Functional organization

- Public spaces
- Congress halls
- Exhibition halls
- Meeting spaces
- Circulation
- VIP spaces
- Staff spaces
- Service areas
- Loading systems
- Technical areas
- Structural organization

c. Selected Architectural Areas

Scale: 1/100

Selected significant portions of the project should be developed at a higher level of architectural resolution.

These may include:

- Main entrance
- Main foyer
- Congress hall
- Exhibition hall interface
- Public circulation zone
- Meeting room cluster
- Other significant spaces identified through the architectural concept

d. Architectural Sections

Scale: 1/200 and selected sections at 1/100

Sections should demonstrate:

- Spatial hierarchy
- Large span structural systems
- Congress hall geometry

- Exhibition halls
- Public foyers
- Vertical circulation
- Building envelope
- Environmental strategies
- Relationship with topography
- Relationship with public open spaces

e. Elevations

Scale: 1/200

Elevations should demonstrate:

- Overall architectural character
- Relationship between large interior volumes and facade
- Building scale
- Material decisions
- Openings
- Environmental response
- Relationship with surrounding context

f. Structural System

Students should clearly communicate:

- Primary structural system
- Large span strategy
- Structural grid
- Main columns and supports
- Structural depth
- Relationship between structure and architectural space
- Relationship between structure and building envelope

g. Congress Hall Development

At least one principal congress hall should be developed in detail.

Students should demonstrate:

- Seating organization
- Stage
- Visibility
- Entrances and exits
- Emergency evacuation
- Acoustic strategy
- Technical areas
- Structural system
- Relationship with foyer

h. Exhibition Hall Development

At least one exhibition hall should demonstrate:

- Flexible exhibition layout
- Structural span
- Service access
- Loading strategy
- Visitor access
- Emergency exits
- Technical infrastructure
- Relationship with adjoining public spaces

i. Circulation and Logistics Diagrams

Final presentation should clearly demonstrate:

- Public circulation
- Congress circulation
- Exhibition circulation
- VIP circulation
- Staff circulation
- Service circulation

- Exhibition logistics
- Emergency evacuation

j. Environmental Strategy

Students should communicate:

- Orientation strategy
- Natural light
- Solar control
- Building envelope
- Energy related design decisions
- Landscape contribution
- Environmental approach to large interior volumes

k. Perspectives

Perspectives should communicate major architectural experiences including:

- Urban approach
- Main public plaza
- Main entrance
- Foyer
- Congress hall
- Exhibition hall
- Public circulation
- Outdoor event or landscape space

l. Final Model

Scale: 1/500

The final model should demonstrate:

- Overall architectural strategy
- Building mass
- Large hall volumes
- Public open spaces

- Landscape
- Relationship with surrounding urban context

A selected structural or spatial model may additionally be required.

Studio Principles

- The project should not be approached as a collection of independent halls
- Congress, exhibition, public and service functions should form an integrated architectural system
- Urban strategy should be considered as part of architectural design
- Public open space is a fundamental component of the project
- Large visitor flows should be addressed through clear spatial organization
- Public, VIP, staff and service circulation should be consciously coordinated
- Exhibition logistics should influence architectural organization from the early stages of design
- Large span structural systems should be integrated into the architectural concept
- Structure should contribute to spatial and architectural character
- Congress hall design should respond to visibility, acoustics and audience movement
- Exhibition spaces should provide flexibility for different event configurations
- Service spaces and technical infrastructure should not be treated as secondary additions
- Architecture, structure, circulation, landscape and environmental systems should be developed simultaneously
- The project should demonstrate consistency from urban scale to architectural detail
- Students are expected to develop an independent architectural position supported by their design decisions
- The design process is considered as important as the final architectural product

Studio Rules

- Students are responsible for reading and understanding the AYBU Associate and Undergraduate Education and Examination Regulations.
- ARCH 401 Architectural Design Studio V is the fifth stage of the architectural design studio sequence.
- ARCH 401 is a non exam course. Students are evaluated according to their design process, studio participation and architectural production throughout the semester.
- The semester will be divided into stages corresponding to different phases of architectural design development.
- Project development will be monitored through regular studio critics, discussions and presentations.
- Students are expected to attend studio regularly and actively participate in critics.

- Students must bring the required drawings, models and design studies to each studio session.
- Unless otherwise announced, architectural drawings are expected to be produced by hand.
- Instructors reserve the right to deny critic or jury participation when required work is incomplete, insufficient or has not been submitted on time.
- Attendance will be recorded during studio hours.
- Students must attend at least 80 percent of studio hours.
- Students who do not meet the attendance requirement will receive an NA grade and will not be permitted to attend the Final Jury.
- Participation in the Preliminary Jury is compulsory.
- Participation in the Final Jury is compulsory.
- Participation in all announced and unannounced sketch problems is compulsory.
- Course communication, announcements, assignments and additional materials will be shared through AYBUZEM.
- Requirements concerning physical and digital submissions will be announced during the semester.
- Submission of required materials before the Preliminary Jury and Final Jury is a condition for participation in the respective jury.

Semester Schedule

Important Note on Weekly Progress

The topics listed in the weekly schedule should not be understood as subjects that will be introduced or considered only during the corresponding week. They define the **minimum level of project development expected to have been reached by that week.**

By the beginning of each week, students are expected to have already considered the listed architectural issues within the specific context of their own projects, explored relevant alternatives and developed appropriate design responses.

Architectural design is a continuous and iterative process. Urban strategy, functional organization, circulation, large span structure, congress hall design, exhibition logistics, environmental performance, building envelope and public space should therefore be considered throughout the semester and progressively refined as the project develops.

Students are expected to attend each studio session with drawings, diagrams, models and other project specific studies demonstrating that the listed issues have already been investigated and that appropriate architectural solutions have been developed.

The weekly schedule therefore represents **expected project progress and minimum design resolution**, rather than a sequence of independent weekly subjects.

SYLLABUS			
WEEKS	DAYS	TOPIC	Min. Number of Presentations
1		Introduction and Project Brief Introduction to CONVERGENCE	

		Congress and exhibition center as a complex public building Introduction to project site Discussion of urban, architectural and infrastructural scales Explanation of semester stages and requirements	
2		Case Studies and Building Typology International congress and exhibition center examples Congress hall typologies Exhibition hall typologies Public circulation Service systems Large span structures Urban relationships	Stage1 TWO
3		Site, Program and Event Analysis Site analysis Relationship with surrounding educational and cultural institutions Transportation Pedestrian movement Event scenarios User groups Congress and exhibition program Service and logistics analysis	
4		Urban Strategy and Massing Building placement Urban connections Public plaza Pedestrian approaches Vehicle access Public transportation relationships Service access Landscape strategy Massing alternatives	
5		Program, Circulation and Hall Organization Congress center organization Exhibition hall organization Foyer systems Public circulation VIP circulation Staff circulation Service circulation Exhibition logistics Preliminary large span strategy	Stage2 TWO
6		Integrated Architectural Strategy Development of site plan Building organization Large hall dimensions Public space hierarchy Structural strategy Landscape Vehicle organization Loading systems	
7		Preliminary Design Development Development of 1/500 site plan Development of 1/200 plans	

		Development of sections Congress hall studies Exhibition hall studies Structural strategy Circulation diagrams Preparation for Preliminary Jury	
8		PRELIMINARY JURY (requirements are to be announced in class)	
9		Jury Evaluation and Design Revision Evaluation of Preliminary Jury feedback Revision of urban strategy Revision of building organization Revision of congress and exhibition relationships Development of structural strategy Development of circulation and logistics	Stage3 FOUR
10		Public Space and Event Experience Main entrance Public plaza Main foyer Pre function spaces Congress circulation Exhibition circulation Relationship between interior and exterior public spaces Spatial character	
11		Congress and Exhibition Resolution Congress hall development Visibility Acoustics Audience circulation Exhibition hall flexibility Exhibition layouts Loading Service movement Emergency circulation	
12		Structural and Technical Integration Large span structural system Structural grid Building cores Service systems Technical spaces Fire safety Building envelope Environmental response Architectural sections	
13		Architectural Character and Urban Integration Coordination of plans and sections Elevation development Material decisions Public space development Landscape Building envelope Perspective development Model development	
14		Final Critics Comprehensive review of urban strategy	

		Review of congress and exhibition organization Review of public spaces Review of circulation Review of service logistics Review of structural system Review of environmental strategy Review of architectural representation	
15		Final Presentation Development Final architectural critics Drawing coordination Final structural coordination Final circulation and logistics control Model completion Presentation organization Preparation for Final Jury	
	To Be Announced	FINAL JURY (requirements are to be announced in class)	

Grading Policy:

Architectural design education requires continuous participation in the design process. Attendance alone is not considered sufficient.

Students are expected to document the development of their projects throughout the semester, regularly present their work and receive critics from studio instructors.

There will be one Preliminary Jury and a number of scheduled or unscheduled sketch problems according to studio requirements.

STAGES EVALUATION : %20

PRELIMINARY JURY : %20

FINAL JURY : %60

wish you a successful semester ☺