योजना एवं वास्तुकला विद्यालयः नई दिल्ली

School of Planning and Architecture: New Delhi

(Department of Physical Planning)

Syllabus: Integrated B. Planning - M. Planning Program

The students of Bachelor of Planning in SPA New Delhi have to study 39 theory subjects (including electives) and undergo practical training in 8 studios in order to get a Bachelor of Planning degree over a period of four years. Firstly, this indicates that Bachelor of Planning students comprehensively learn theoretical aspects of planning. Secondly, in studios we cover the complete hierarchy of plans beginning with site plans and ending with the preparation of a regional plan in the seventh semester. First year studies of course complement the studio work undertaken in the subsequent years. In the last semester, the students are also required to do thesis where they carry out research on the topics of their interest. This indicates that Bachelor of Planning is a well-rounded undergraduate degree program, preparing professionals who are ready to carry out real life planning tasks.

However, job markets both in the public sector as well as the private sector present a dilemma where employers largely prefer planning professionals with postgraduate degrees. In order to meet the job market requirements, some of the professionals with Bachelor of Planning degree have to undertake a master degree program either in SPA New Delhi or elsewhere inside or outside the country. Here planning professionals with Bachelor of Planning degrees face several problems. Since all planning institutions in India allow lateral entry for admission in their postgraduate programs and admit candidates who hold academic qualifications in the fields of architecture, civil engineering, and the social sciences, this group of students rightly cannot move forward without first learning basics of planning. Consequently, Bachelor of Planning degree holders studying a conventional postgraduate planning programs end up repeating a number of theory subjects and some studio work that they have already done. This sets in a kind of inertia in the students, which is not good for professional planners in the long run. For Bachelor of Planning degree holders this is also a waste of time as well as less effective use of scarce national resources.

In this line of thinking, the Department of Physical Planning supports the idea of finding a new path for Bachelor of Planning degree holders, where without compromising on the quality of the professional training; the students can also meet job market requirements while at the same time make effective use of their time as well as effective use of the scare national resources as they take up some seats, which potentially could have gone to other deserving and qualified candidates.

In order to resolve this dilemma, a new path is presented in the form of the proposed Five Year Integrated Master of Planning Program specifically meant for the students studying for Bachelor of Planning degree program in SPA New Delhi. After spending another year in the Department, the students will have studied another 9 theory subjects (making a total of 48 theory subjects) and two more studios plus a postgraduate level thesis. The total annual intake is proposed to be 15 students. Only those students scoring first division (as per the School rules) in terms of aggregate marks scored up to the Seventh Semester of Bachelor Planning in SPA New Delhi will be eligible to apply for admission. Reserved category candidates with at least 50 percent marks will also be eligible for admission. The students could fill an admission form by the end of the Seventh Semester for consideration by the School. Admission will be based on a set of objective criteria including aggregate marks up to the Seventh Semester, interviews, group discussion, etc.

We believe that this is a better way of imparting postgraduate education to the students who are already admitted into the Bachelor of Planning program. This program is intended to pursue the following objectives:

- To prepare the students with advanced knowledge about finance, climate change, planning organizations, and public policy.
- To make the students fully fit for the current job markets in which postgraduate degree is preferred.

Through the proposed Five Year Integrated Master of Planning Program, the following skills will be imparted:

- Critical thinking, analysis, and problem solving
- Coherent and cogent Writing and presentation
- Organizational analysis
- Leadership: inspiration and motivation skills
- Ability to innovate and create new ideas and knowledge
- Collaborative working with the ability to make independent professional judgments

The syllabus up to the Seventh Semester will remain same for both the Bachelor of Planning students as well as for the students who will potentially be admitted to the proposed Five Year integrated Master of Planning Program. The details of the eighth to tenth semester are as follows:

EIGHTH SEMESTER

IMPC-8.1: PLANNING PRACTICE & LEGISLATION-II

Lecture hours per week: 4 (1) Internal assessment: 100 marks

End semester examination: 100 marks

Total marks: 200

Credits: 4

Planning Practice

Unit 1: Ethical Planning

Human values and moral reasoning, Planning practice and ethical dilemmas, resolution of ethical dilemmas, code of professional conduct, public sector planner and conduct rules

Unit 2: Professional Engagement and Office Administration

Tenders, Contracts, Formulation of Project Proposals, Professional fees for different types of planning practice, setting u of planning firms, official correspondence, office management practices

Unit 3: Deliberative Practice

Learning from stories, listening, argumentation, power, politics and planning, deliberative and participatory planning

Planning Legislation

Unit 1: Comprehensive Plan as a Law

Statutory nature of comprehensive plan and its implications, Modifications, Case laws related to matters related to plan preparation, implementation and enforcement. Laws related to plan participation.

Unit 2: Planning Law and its interface with other laws affecting development

Current laws related to environment, heritage, housing, real estate, property law and their interaction with planning law. Other Acts at a particular time for e.g. special investment region acts, model community participation law.

Unit 3: Organisations for Plan Implementation

Special purpose bodies for plan implementation such urban/metropolitan development authorities, improvement trusts, water and sewerage boards, housing boards, slum improvement/clearance boards, transport undertakings; regional development boards.

Unit 4: Case Law related to Change of Use

Case laws related with Zoning, Planning Permissions and Building Permission. Identification of land use conflict and methods of resolution-Examples and Case Studies

IMPC-8.2 CLIMATE CHANGE, RISK, AND RESILIENCE

Lecture hours per week: 3(L) Internal assessment: 50 marks

End semester examination: 100 marks

Total marks: 150

Credits: 3

Unit 1: Basics of Climate Change and Resilience

Concepts of global warming and climate change, factor of climate changes, challenges and issues of climate change concepts of resilience community and settlements

Unit 2: Planning, Management, Resilience and Climate Change

Global policies on climate change, national and state policies on climate change, action plan and resilience plan for state, region and urban area. Integration of climate change policy and action plan in various levels of development plans.

Definition of calamities, disaster, disaster preparedness and mitigation, concepts of risk and vulnerability, Development and Disaster Management-Interface

Unit 3: Concept of community, city and regional resilience

Energy efficient development, Compact city form, Transit oriented development. Mechanisms and measures for mitigating and adapting to climate change at various levels Geospatial techniques for analyzing city form, energy efficient development, solar potential utilization studies, wind flow analysis studies

Contents and details of various disaster management plans for national, state and settlement level, integration of disaster management plan with other development plan

Unit 4: Geospatial Technologies for Climate Change Risk Mitigation and Management

Remote sensing and GIS for climate change, natural disasters, flood hazard zoning, landslide hazard zonation, and climate change risk and assessment for community and statements, etc. early warning systems, Geomorphology for urban areas, Thermal images for assessment of Hazard Risk and Analysis,

IMPC-8.3: FINANCING OF CITY AND REGIONAL DEVELOPMENT

Lecture hours per week: 3 (L) Internal assessment: 50 marks

End semester examination: 100 marks

Total marks: 150

Credits: 3

Unit 1: Understanding Funding Urban, Rural and Regional Development

Approaches, concepts, components, processes, and scope of financing urban, rural and regional development; Identification of forms of projects, their planning and financing; Financing agencies funding development projects

Unit 2: Inclusion of Funding Arrangements in Development Plans

Nature of financial details involved in urban, rural and regional development; Nature of financial details to be included in city plans, rural development plans, and regional plans; Working our funding for specific projects like Metro projects, Golden Quadrilateral road project, sanitation projects, water projects, solid waste management projects, etc.; Financing of urban development, infrastructure and services- mechanism and instruments, subsidy reduction, cost recovery, public private partnership; financial appraisal, investment appraisal; Financial Risk- Sources, Measures and perspectives on risk, Sensitivity analysis and pricing and cost recovery mechanism

Unit 3: Sources of Funding Development Projects

Inter-governmental fiscal relationship between Central, State and Urban Local Government; Credit worthiness of planning and development agencies; Methods of assessing credit worthiness and agencies assessing credit worthiness; Development of bankable projects; Special purpose vehicles; Nature of public private partnerships for funding development projects; Reasons for cost overruns of funding of development of planning projects.

Unit 4: Municipal Finance

Urban fiscal reforms, municipal finance and urban inclusion; Equities, loans and debt

financing, municipal bonds; Land and non-land based sources; Structure of finances, fiscal

problems and issues of financial management; Implications of the 74th Constitution

Amendment Act for municipal finance, and expenditure patter; Bilateral and multi-lateral

lending institutions mobilizing resources for projects through financial resources, land

resources, project resources, and other resources.

IMPE-8.4: ELECTIVE

Lecture hours per week: 3(L)

Internal assessment: 100 marks

End semester examination: None

Total marks: 100

Credits: 2

This elective being offered by any department of studies of the School and will be chosen by

the students from the common boutique of subjects.

IMPS-8.5: PLANNING STUDIO

Internal assessment: 300 marks

End semester examination: 200 marks

Credits: 11

This studio will focus on the preparation of special plans based on contemporary planning

policies of the government, such as, smart city development plan, etc.in the current times.

The decision to make a choice about the type of development plan will be taken by the studio

faculty collectively.

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NINTH SEMESTER

IMPC-9.1: INSTITUTIONS AND PLANNING

Lecture hours per week: 3 (L) Internal assessment: 50 marks

End semester examination: 100 marks

Total marks: 150

Credits: 3

Unit 1: Nature of Planning Organizations

Forms and functions of planning agencies; Nature of involvement of planners in these agencies; Difference in the workings, roles and jurisdictions of development authorises in different state; Nature of planning organizations in the private sector and the third sector.

Unit 2: Multiplicity of Planning Organizations

Coordination and integration among planning agencies; Nature of conflicts and contestations among planning agencies; Joined up local government; Horizontal and vertical linkages among planning agencies; Convergence among planning agencies; Complications of organizational integration due to 73 and 74 amendments to the Constitution of India.

Unit 3: Laws and Plans

A study of redevelopment related laws, rules and regulation; Nature of redevelopment development plans; Brownfields versus greenfield development; Roles and motivations of the private sector in redevelopment.

Unit 4: Culture and Tourism

Cultural aspects of redevelopment; Redevelopment for economic purposes including tourism; a study of specific cultural districts

IMPC-9.2: URBAN RENEWAL

Lecture hours per week: 3 (L) Internal assessment: 50 marks

End semester examination: 100 marks

Total marks: 150

Credits: 3

Unit 1: Resettlement and Rehabilitation

Defining renewal; Nature of development before and after redevelopment; Resettlement and rehabilitation polices and their implementation; Winners and losers in the redevelopment Process.

Unit 2: Comprehending Redevelopment

Understanding urban redevelopment and its different dimensions; What causes the processes of urban redevelopment to start; Relationship of urban redevelopment with economic regeneration, conservation and heritage important Indian examples of redevelopment.

Unit 3: Gentrification

Defining gentrification, its forms, causes, and planning implications; Supply side theories of gentrification; Demand side theories of gentrification; Local area planning; Local tourism and regeneration plans; Marketing and branding cities for urban regeneration; Global success stories of urban regeneration.

Unit 4: Planning for Redevelopment or Gentrification

Spoiled Mixture: Where Does State- Led 'Positive' Gentrification End; Developing Sustainability policy and gentrification; Rethinking Sustainability Cities: Multilevel Governance and the "Urban" Politics of Climate Change; From sustainable development to carbon control: eco-state restructuring and the Politics of urban and regional development; Participation and the Pursuit of Sustainability in Cities; Impossible "Sustainability" and the Post-political Condition

IMPC-9.3: PLANNING AND PUBLIC POLICY

Lecture hours per week: 3 (L) Internal assessment: 50 marks

End semester examination: 100 marks

Total marks: 150

Credits: 3

Unit 1: State as a Manager of Resources and Politics of Provision

Political culture of Indian State: Centre, State and Local political economy, emergence of state in the federal set up; politics of the state and bureaucracy; politics and emergence of civil society; regeneration and redevelopment politics; Property rights, norms and standards, government market and market by government; regulatory state, reforming state, rent-seeking state and their spatial implications; Land use Politics, politics of provision of housing in urban and rural areas, infrastructure; Decision Making, Decision-Taking process. Case studies from India and abroad on planning and political decisions in their impact on rural and urban development. Examples from: South Korea: conversion of rural land to urban land, China, and other countries.

Unit 2: Nature and Making of Public Policy

What is planning policy- what does it encompass; Empirical and normative approaches to planning policy analysis; Interest articulation and agenda-setting in planning policy formulation; Information and expertise as inputs into decisions; Nature of planning problems; Planning as a public issue-policy analysis and processes: Six steps in policy analysis: how are polices made, who influences the policy agenda and what issues affect policy's 'success' and 'failure', theoretical frameworks, the role of institutions in the planning policy process ,and the motivation of policy actors. Objectives of the planning polices I: distributing benefits to society; Objectives of the planning policies II: redistributing benefits, regulating behavior; Planning policy design - implementation and multiplicity of interests; Evaluating planning policy outcomes - and understanding evaluators.

Unit 3: Planning Policy Analysis and Strategic Policy Planning

Overview of policy process models, policy initiation: multi-stream approaches, policy implementation analysis, life-course approach to policy analysis, Case studies in policy process analysis, policy integration: possible areas of integration in planning; Differences between strategic planning and management in the public and private sectors; Strategic decisions and evaluation, strategic leadership; Coordination and networks; Crisis management; Transformational strategic management.

Unit 4: Planning Policy Management and Delivery

How are new information and communication technologies shaping public service

delivery?: E-Governance, e-panchayats, e-market, etc.; Transparency, accountability,

accessibility, and participatory mechanisms; Trends and pressures that affect public service

organizations; Market based arrangements, multi-service provider arrangements in public

sector setting, and benchmarks in policy management; Land, environment, health, water

and other policies-integration and disintegration of policies- frequency and commitments

to change; Global commitments: goal 11 of the SDGs, Environment, etc., and its

commitment at the national, state and local level; Land policy: interest groups, Acts, rules,

agents and policy making processes; Latest planning policies and their evaluation in India.

IMPC-9.4: ADVANCED RESEARCH METHODS

Lecture hours per week: (L)

Internal assessment: 50 marks

End semester examination: 50 marks

End semester examination: 50 f

Total marks: 100

Credits: 2

Unit 1: Understanding Qualitative and Mixed Methods Research

What is qualitative research, types of qualitative research, designing qualitative research,

research ethics; Introduction to mixed methods, challenges in designing mixed methods

research

Unit 2: Fieldwork and data collection methods

Entering the field, Interviews, Observations, Focus Group Discussions, Data collection from

documents and archives, other ethnographic methods

Unit 3: Analyzing qualitative Research

Analyzing qualitative data, construction of categories, phenomenological analysis, narrative

analysis, ethno graphic analysis, Types of evaluation, Design of evaluation studies, measuring

qualitative and quantitative impacts.

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IMPE-9.5: ELECTIVE

Lecture hours per week: 3 (L) Internal assessment: 50 marks

End semester examination: 50 marks

Total marks: 100

Credits: 2

IMPE-9.5.1 ENVIRONMENTAL ECONOMICS

Unit 1: Uses of Monetary Valuation

Social Cost Benefit Analysis, National Resource Accounting, Pricing, Non- use Value, Techniques of monetary evaluation and valuation methodologies

Unit 2: Economic Approaches for Measuring Sustainable Development

Measuring wealth, modifying GNP saving, technological changes, social capital, creating global markets; Relation between development and environmental stress; Environmental Kuznet's curve hypothesis- theory and empirical evidence

Unit 3: Environmental Standards

Environmental certification, Performance evaluation, Environmental Auditing, Ecolabeling, ISO, etc.

Unit 4: Environment and Development

Economy- environment interaction; Material Balance Principle; entropy law; market failure; Open, closed and common access resources; resource economic-environmental-ecological economics: characteristics and synergy; Market failure; Pigouvian vs Coasian solution; detrimental externality and non- convexities in the production set; collective action.

IMPE-9.5.2 URBAN MOBILITY

Unit 1: Urban Structure and Transport System

Concepts of urban mobility, issues and challenges of motilities in Indian context, concepts of mobility index, use and validity index in India; Types of Urban Form and Structure, Impact of urban form and structure on transport system development, urban structure and mobility levels, concept of accessibility, land use-Transport Cycle, Transit, oriented Development (TOD), Case Studies.

Unit 2: Comprehensive Transport Planning and Economic Evaluation

Study area definitions, surveys and studies, survey techniques; and transport planning process -trip generation, trip distribution, modal split, trip assignment; land use transport models, Scenario development, Comprehensive Mobility Plan (CMP) Components, Case studies; Economic appraisal of transport projects, techniques for estimating direct and indirect road user costs and benefits, value of travel time.

Unit 3: Transport and Environment

Traffic noise- factors affecting nose, noise abatement measures, standards; air pollution-factors affecting air pollution levels, abatement measures, standards; Traffic Safety-accident reporting and recording systems, factors affecting road safety; Transport Planning for Target groups - Children, adults, handicapped and women; Norms and Guidelines for highway landscape; Street lighting type - standards and design considerations.

Unit 4: Transport Policy and Management

Review of national, state and local level transport polices and their relevance in spatial and economic planning; pricing and funding of transport system; energy and environment implications in transport; existing organizational and legal framework, transport coordination; Transport System Management (TSM) Plans

IMPE-9.5.3 ADVANCED REMOTE SENSING APPLICATIONS IN PLANNING

Unit 1: Digital Image Processing

Basic principles; Image rectification and registration, Geometric corrections, Image enhancement, contrast enhancement, stretch, filtering and density slicing; sharpness; Image classification, supervised and unsupervised classifications, knowledge based classifications; Generation of FCC, Interchangeable formats (BMP, TIFF, GIF, JPEG, PNG, etc.); Images from open sources - Google, Bhuwan, etc.; applications in planning, limitations; visual interpretation.

Unit 2: Image Interpretations

Basic principles, elements of image interpretation, factors governing quality. and interpretability, visibility of objects; collateral material; interpretation keys, selective keys, elimination keys; ground trothing; Multiple images-multi spectral, multi date, multi thematic, thermal, etc., convergence of evident; Interpretation of land use/ land cover, change detection, estimation of population, density, pattern, applications in planning, limitations.

Unit 3: GPS Applications for Planning

Introduction to GPS; Space Segment, Observation principles and signal structure, Structure of GPS Navigation Data; GPS Receiver Classification; Limitation of Systems Accuracy; Memory capacity; Examples of GPS Receivers, Navigation receivers,; Examples in planning applications.

Unit 4: Digital Photogrammetry and e-Governance

Basic principles, Digital stereo camera, Digital aerial photographs, stereo-pairs; Digital contouring, Digital Elevation Modeling (DEM); Cadastral mapping; 3D Urban modelling, TRIVIM, etc., UAVs, Drone, applications and limitations, security and legal issues; Mobile mapping, components, Location based services, PDAs and map visualization, Application in planning; mobile data collection, crowd sourcing of data, Cloud computing; mobile and internet based applications in e-governance

IMPE-9.5.4 SUSTAINABLE CITIES

Unit 1: The Rise and fall of Urban Sustainability

Brundtland world; Spaces of Hope; The Spaces of Utopia; Dialectical Utopianism; Visions of the city: utopianism, power and politics in twentieth century urbanism; Restorative Utopias, Ernest Callanbach's Ecotopia; Building the City, Structuring Change; Public Participation and Local Sustainability: Questioning a Common Agenda in Urban Governance

Unit 2: Planning and Measuring Sustainability

Planning and Sustainability: The Elements of a New and Improved Paradigm; Green Cities, Growing Cities, Just Cities: Urban Planning and the Contradictions of Sustainable Development; Environmental Justice and the Sustainable City; jobs, water, energy, transportation, where sustainability initiatives are house within the city (e.g. public works, environment, economic development, etc.): Sustainability Indicators: Measuring the Immeasurable; Measuring urban sustainability. Sustainability assessment: the state of the art; Community Interests and Indicator System Success; and sustainability indicators used by a city of your choice;

Unit 3: Governance and Sustainability

Urban ecological footprints: Whys cities cannot be sustainable and why they are a key to sustainability; The genesis, history, and limits of carrying capacity; Planning with Ecological Footprints: A Sympathetic Critique of Theory and Practice; Government, Governance and Local Sustainability; The myth of social capital in community development; Social Capital in Development Studies; The Usefulness-and Limitations-of Social Capital as an Analytical Tool for Progressives; Beyond Distribution and Proximity: Exploring the Multiple Specialties of Environmental City Regions and Social Reproduction: A "Place" for Sustainable Development?; Problematizing the Politics of Sustainability; Cities and the Geographies of "Actually Existing Neoliberalism"; *The Neoliberal City:* Charactering the "New" Politics of Sustainability Fixes; The environment and the entrepreneurial city: searching for the urban "sustainability fix"; "Third Wave" Sustainability? Smart Growth and Regional Development; Sustainability schizophrenia or "actually existing sustainability": toward a broader understanding of the politics and promise of local sustainability; *Alternative routes to the Sustainable city: Aústin, Curitiba, and Frankfurt.*

Unit 4: Social Sustainability

What is social sustainability? A clarification of concepts; Social sustainability: a potential for politics; Urban Policy Engagement with Social Sustainability; Towards the Healthy City: People, Places, and the Politics of Urban Planning; Urban Sustainability and Economic Development; Implementing industrial ecology? Planning for eco-industrial parks; Drivers and limitations for the successful development and functioning of EIPs (eco-industrial parks); Dawn of the Living Wage: The Diffusion of a Redistributive Municipal Policy; The Politics and Practice of Economic Justice: Community Benefits Agreements as Tactic of the New Accountable Development Movement; Cooperatives as a community development strategy: Linking theory and practice; The Insurgent Architect at Work, Toward the Just City; The urban impossible: A eulogy for the unfinished city.

IMPE-9.5.5 SPATIAL JUSTICE

Unit 1: Coming to terms with Justice

What is justice? What is territorial justice? What is spatial justice? John Rawls' and Amartya Sen's ideas of justice and their relevance to planning; What is a just city?

Unit 2: Planning Rights and the City

Defining planning rights; Forms of planning rights; Sources of planning rights; Utility of Planning rights; The Right to the City: Expositions by David Harvey, Peter Marcuse, and Henri Lefebvre; A study of the Urban Revolution; The Right to Centrality

Unit 3: Spatializing Planning

How space and place are understood in planning? Production of space according to Henri Lefebvre; Types of space: absolute, relative and relational space; Third space of Edward Soja; Power geometry as philosophy of space by Doreen Massey; Relationship between space and time

Unit 4: Spatial Justice

Understanding spatial justice; Forms of spatial justice; how spatial justice manifests itself in the city; Dialectics of spatial justice; Planning in divided cities; Urbanization of injustice; Segregation in the city; The creation of the urban commons; the Right to land shelter and infrastructure

IMPS-9.6: PLANNING STUDIO

Internal assessment: 300 marks

End semester examination: 200 marks

Total marks: 500

Credits: 11

This studio will focus on the preparation of subject specific functional plans such as sanitation plan, water management plan, solid waste management t plan, mobility plan, etc. leading up to the preparation of a detailed project report.

TENTH SEMESTER

IMPT-10-1: PLANNING THESIS

Internal assessment: 600 marks

End semester examination: 400 marks

Total marks: 1000

Credits: 11

The students will choose a subject of their academic interest after careful discussion with the faculty in the Department and the School. Each student will pursue his thesis under the supervision of an allocated faculty.

Subject Code	Name of the Subject		Internal Marks	External Marks	Total Marks	Credits
Eighth Semeste	er					
IMPC-8.1	Planning Practice & Legislation -II		100	100	200	4
IMPC-8.2	Climate Change, Risk, and Resilience		50	100	150	3
IMPC-8.3	Financing of City and Regional Development		50	100	150	3
IMPE-8.4	One elective to be taken from the School		100	0	100	2
IMPS-8.5	Planning Studio: This studio will focus on the preparation of special plans based on contemporary planning policies of the government, such as, smart city development plan, etc. in the current times.		300	200	500	11
Total			600	500	1100	23
Ninth Semester	r					
IMPC-9.1	Institutions and Planning		50	100	150	3
IMPC-9.2	Urban Renewal		50	100	150	3
IMPC-9.3	Planning and Public Policy		50	100	150	3
IMPC-9.4	Advanced Research Methods		50	50	100	2
IMPE-9.5	Elective: Choose only one 1. Environmental		50	50	100	2
IMPS-9.6	Planning Studio: This studio will focus on the preparation of subject specific functional plans such as sanitation plan, water management plan, solid waste management plan, mobility plan, etc. leading up to DPR		300	200	500	11
Total			550	600	1150	24
Tenth Semesto	er					
IMPT-10.1	Planning Thesis	Planning Thesis 600		400		11
Total		600	400		1000	11

Note: C for core subjects, E for electives subjects, S for studio subjects, T for thesis