

Niveau :	MASTER					année
Domaine :	DROIT ECONOMIE GESTION					M1
Mention :	Economie de l'environnement, de l'énergie et des transports					
Parcours :	Data Analyst for Spatial and Environmental Economics (DASEE)					
Volume horaire étudiant :	203 h	150 h	h	h	300 h	653 h
	cours magistraux	travaux dirigés	travaux pratiques	cours intégrés	stage ou projet	total
Formation dispensée en :	<input checked="" type="checkbox"/> français		<input checked="" type="checkbox"/> anglais			

Contacts :

Responsable de formation	Scolarité – secrétariat pédagogique
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Composante(s) de rattachement : UFR DROIT, SCIENCES ECONOMIQUE ET POLITIQUE	

Objectifs de la formation et débouchés :

The DASEE (**Data Analyst for Spatial and Environmental Economics**) master's program is a high-quality two-year program that offers an integrated view of urban/regional and environmental issues from an economic perspective, with a particular focus on georeferenced data management and analysis. It is designed for students with an interest in spatial economics, environmental economics and quantitative analysis. The program addresses highly relevant economic issues in today's modern economies such as the environmental impacts of cities, the determinants of location choice of economic activities in urban, periurban and rural areas, the advantages and disadvantages of spatial agglomeration in terms of economic efficiency, equity and environment, the design of local economic development policies and place-based transportation and environmental policies. Students will learn to tackle all these problems with a level of theoretical abstraction and will be able to design and implement relevant empirical studies with specialized techniques suitable for georeferenced data: spatial statistics and spatial econometrics. The DASEE program will offer graduates the possibility to undertake PhD research in spatial economics, environmental economics or spatial data analysis as it provides expert skills in theoretical and empirical economics. This will lead to recruitments in academia or in the public/private sectors, environmental consultancies, government, non-governmental organizations and multinational companies.

■ Débouchés du diplôme (métiers ou poursuite d'études) :

The master's program will provide the students with a portfolio of academic and practical skills. These will include the ability to conduct research in spatial economics, environmental economics and spatial data analysis either individually or as part of a team through research design, data collection, analysis, synthesis and reporting. They will also include managerial skills relating to interaction with other people. With the expertise that the students will develop in data analysis applied to spatial and environmental economics, various career perspectives await the students in academia, urban planning and local development agencies or data science agencies.

■ Compétences acquises à l'issue de la formation :

The master's program aims at training future academics and executives to a high level of expertise in the statistical and econometric analysis of data pertaining to spatial and environmental issues. Students of the DASEE master program will be able to manage and analyse geo-referenced data required for investigating the socio-spatial characteristics of territories and derive place-based public policy recommendations including the environmental dimension. The program will also provide students with the skills necessary to understand and critically evaluate findings from current research in spatial and environmental economics and transpose these findings to practical problems and solutions. For that purpose, it will emphasize interaction between theory, policy and practice by focusing on the links between location choices of economic activities and the environment. Finally, a major point of the master's program is that sound management of territorial and environmental issues requires proficiency data and statistical/econometric skills. Therefore, a major focus of the program will be on training students in the design, realization, analysis and restitution of quantitative studies in spatial and environmental economics, since these skills are essential components in the deployment of a territorial economic intelligence activity by local authorities, businesses and engineering offices. The integrative view of spatial and environmental economics, together with a focus on statistical and econometric analysis of data are major innovations of this program with respect to other master's programs offered worldwide, that focus either on spatial economics or environmental economics and in which the quantitative aspect is not as developed as in our proposal.

■ Compétences acquises à l'issue de l'année de formation :

Modalités d'accès à l'année de formation :

■ sur selection :

The master program enrolls: (i) French and non-French students who have completed a Bachelor's Degree in economics or a Bachelor's degree including courses in economics at UBFC (UB or UFC); (ii) French and non-French students who have completed a Bachelor's Degree in economics or a Bachelor's Degree including courses in economics at another French university; (iii) Students from AgroSup Dijon taking the third-year specializations "AGIR sur les territoires : Agricultures, Alternatives, Gouvernance, Initiatives, Ruralités" (Act for Territories : Agricultures, Alternatives, Governance, Initiatives, Ruralities) and "Stratégies et Organisation des Filières et Entreprises Agricoles et Agroalimentaires" (Strategies and Organization of agricultural and agrofood industries) (iv) Students from other higher education institutions with a background in economics and data analysis.

Applications are examined and a shortlist drawn up possibly after interviewing by a panel of academics and professionals. Factors considered are the applicants' academic record, any work experience, motivation and future career plans, and consistency with the course objectives.

There are 15 places available.

- par validation d'acquis ou équivalence de diplôme :

Holders of a master 1 degree or any equivalent qualification: applications shall be examined by a panel to validate equivalent learning outcomes.

Initial education: apply to the enrolment office organizing the course

Continuing professional development: apply to the university continuing professional development department (03.80.39.51.80)

Organisation et descriptif des études :

- Schéma général des parcours possibles :
- Tableau de répartition des enseignements et des contrôles de connaissances assortis :

SEMESTRE 1

UE 1S		CM	TD	Total	ECTS	Type éval	coeff CT	coeff CC	total coef
Spatial economics	Introduction to evaluation impact of urban public policies	18		18	4	CT	4		4
	Location strategies	24		24	4	CC		4	4
TOTAL UE 1		42		42	8		4	4	8

CC : contrôle continu - CT : contrôle terminal

UE 2		CM	TD	Total	ECTS	Type éval	coeff CT	coeff CC	total coef
Environmental economics	Environmental, energy and natural resources economics	24		24	4	CC		4	4
TOTAL UE 2		24		24	4			4	4

UE 3		CM	TD	Total	ECTS	Type éval	coeff CT	coeff CC	total coef
Quantitative techniques	Data analysis		36	36	3	CC CT	2	1	3
TOTAL UE 3			36	36	3		2	1	3

UE 4		CM	TD	Total	ECTS	Type éval	coeff CT	coeff CC	total coef
Spatial statistics and spatial econometrics	Lattice data	24		24	4	CT	4		4
	Spatial statistics	20		20	4	CT	4		4
TOTAL UE 4		44		44	8		8		8

UE 5		CM	TD	Total	ECTS	Type éval	coeff CT	coeff CC	total coef
Professional training	English or French		12	12	3	CT	3		3
	GIS		24	24	4	CT	4		4
TOTAL UE 5			36	36	7		7		7

TOTAL S1		110	72	182	30		30		30
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SEMESTRE 2

UE 1		CM	TD	Total	ECTS	Type éval	coeff CT	coeff CC	total coef
Environmental and transport economics	Transport and environment	15		15	3	CT	3		3
	Seminars in environmental economics		18	18	3	CT	3		3
TOTAL UE 1		15	18	33	6		6		6

CC : contrôle continu - CT : contrôle terminal

UE 2		CM	TD	Total	ECTS	Type éval	coeff CT	coeff CC	total coef
Quantitative techniques	Econometrics, structural models	16	12	28	3	CC		3	3
	Panel data econometrics	16	12	28	3	CC		3	3
TOTAL UE 2		32	24	56	6			6	6

UE 3		CM	TD	Total	ECTS	Type éval	coeff CT	coeff CC	total coef
Spatial statistics and spatial econometrics	Spatial econometrics	24		24	3	CT	3		3
	Advanced topics in spatial statistics	22		22	3	CT	3		3
TOTAL UE 3		46		46	6		6		6

UE 4		CM	TD	Total	ECTS	Type éval	coeff CT	coeff CC	total coef
Professional training	Project in spatial statistics or spatial econometrics				2		2		2
	Dissertation or internship abroad				6		6		6
	English or French		12	12	2	CT	2		2
	Python		24	24		CT	2		2
TOTAL UE 4			36	36	12		12		12

TOTAL S2	93	78	171	30			24	6	30
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■ Modalités de contrôle des connaissances :

The common rules for all LMD degrees can be found on the University website
http://www.u-bourgogne-formation.fr/IMG/pdf/referentiel_etudes_lmd.pdf

● Sessions d'examen :

During the course, the means of assessing students relate to knowledge and skills gained over the year of study. Ability to collect, process and restore information and data by written and verbal summaries is also evaluated. Two examination sessions are held for each module and educational component. Students failing in a subject at the first session with a mark below 10/20 must re-sit the unit. Testing for each educational component may cover each module making up the educational component or the educational component as a whole. The type of test may differ by module or educational component and is defined at the beginning of the semester by the relevant teaching staff (for testing by module) or in the form defined by the pedagogical team (for testing by educational component). Examinations may be time-limited written papers or oral exams, evaluation of individual or group reports, vivas on projects and vivas on dissertations or work placement reports.

● **Règles de validation et de capitalisation :**

Principes généraux :

SET-OFF: Marks are set off against each other for each semester. The mark for the semester is calculated from the average mark for the semester's educational components weighted by a coefficient. Students pass the semester if the coefficient-weighted general average for the educational component is 10 or more out of 20.

ACCUMULATION: Each educational component earns students a number of European Credits (ECTS). An educational component is validated and can be accumulated, that is permanently acquired, when the student obtains a weighted average of 10 or more out of 20 after set-off among each module of the educational component. Each educational component validated enables the student to be allocated the corresponding European credits. If items (modules) composing the non validated educational component have a value in European credits, they can also be accumulated when the marks for those items are of 10 or more out of 20.

The possibility of repeating a semester is subject to the opinion of an awards board.