

## **ARTEM**

# an alliance which is unique of its kind



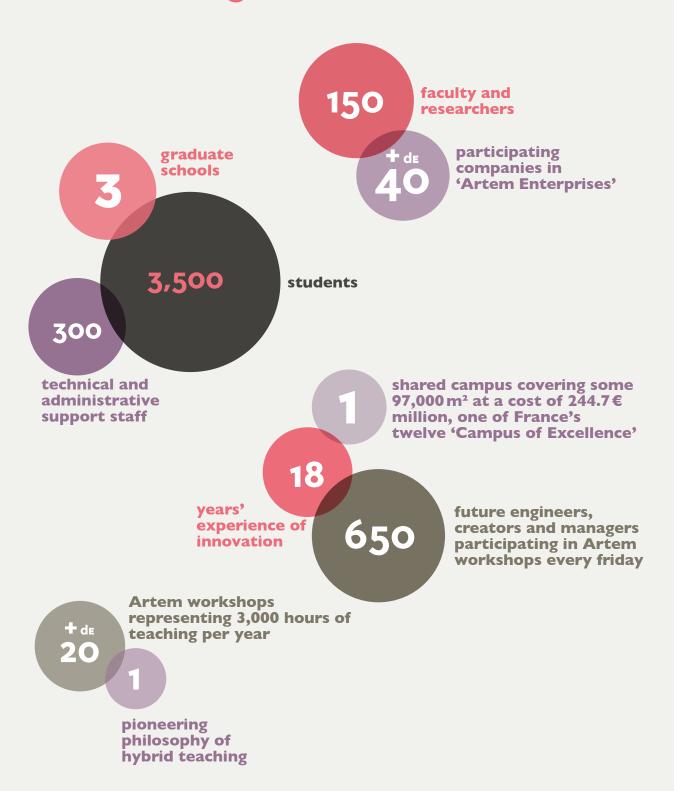
Artem is an alliance between three Institutes of Higher Education: the Nancy Graduate School of Art and Design, ICN Business School and Mines Nancy.

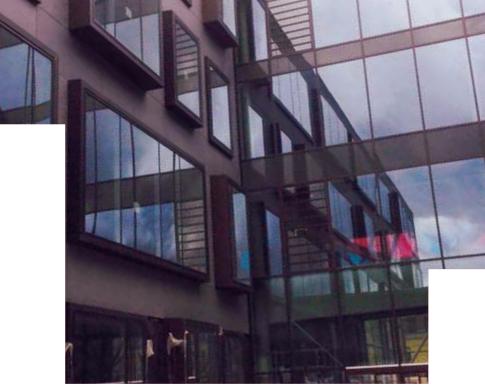
It is supported by all the regional authorities concerned: the Grand Nancy Metropole, the County Council of Meurthe et Moselle, and the Regional Council of France's Grand Est Region.

Government ministers too, in charge of Culture, National Education, Research and Industry have pledged their support for the project.

The three Schools share a common campus with other university entities, in particular the Institut Jean Lamour (IJL), a research laboratory in the field of Materials Science, and the University of Lorraine's Management School, ISAM-IAE.

## > ARTEM in figures





# presentation of the three artem schools

ÉCOLE

ÉCOLE NATIONALE SUPÉRIEURE D'ART

# nancy graduate school of art and design

The Nancy Graduate School of Art and Design (ENSAD), founded in 1708 by the Dukes of Lorraine, is the one School of the seven national Schools established in France's regions which provides the widest range of graduate programs (Bac +5 / 5 years post-High School) specialising in the professions associated with art, communication and design.

Its mission is to provide a public service which is open and unique, maintaining a balance between academic research and professional training. It is a government approved institution and plays a significant cultural role, active not only in the Lorraine region of France, but internationally, via its 38 partnership agreements in Europe and world-wide. The ENSAD is also developing its post-Master programs, with an 'Offshore School', a program of research into Creation and globalisation, based in Shanghai, and a doctoral program at the National Workshop in Typographical Research.

www.ensa-nancy.fr



## icn business school

ICN Business School is a member of the Management Schools chapter of the Conférence des Grandes Écoles. It trains its students and practising managers to develop innovation through creativity, for the benefit of companies and organisations. Its teaching methodology is driven by the principles of transversality and inter-disciplinarity which are essential to the spirit of the Artem Alliance.

The ICN community is inspired by three fundamental values: open-mindedness, commitment and team spirit. The School was founded in 1905 as the Institut Commercial de Nancy and in 2003 became ICN Business School, a private institution of higher education, approved by the French government and affiliated to the University of Lorraine. The School has been awarded EQUIS and AMBA international accreditations

www.icn-artem.com





## Mines nancy

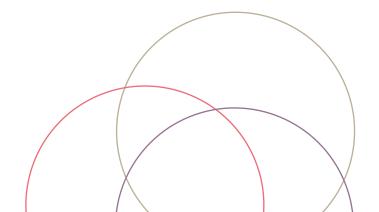
Mines Nancy is a French Graduate School of Science, Engineering and Management, steadily acknowledged in the rankings as one of the best in France. Mines Nancy has been training high-level, generalist and humanist engineers since its creation in 1919. More than 800 students are educated and trained there each year, supported by 250 professors, researchers and administrative staff. The School is making the Industry of the Future a strategic priority in order to support businesses faced with the challenges set to arise in their industrial transformation.

Mines Nancy delivers 3 graduate programs: the cross-sector engineering program 'Ingénieur Civil des Mines' and 2 specialist engineering programs: 'Materials and Production Management' and 'Conception and Design Engineering'; 3 specialist Master programs®; 2 international Master programs and 9 Master programs. All programs are based on high qualified

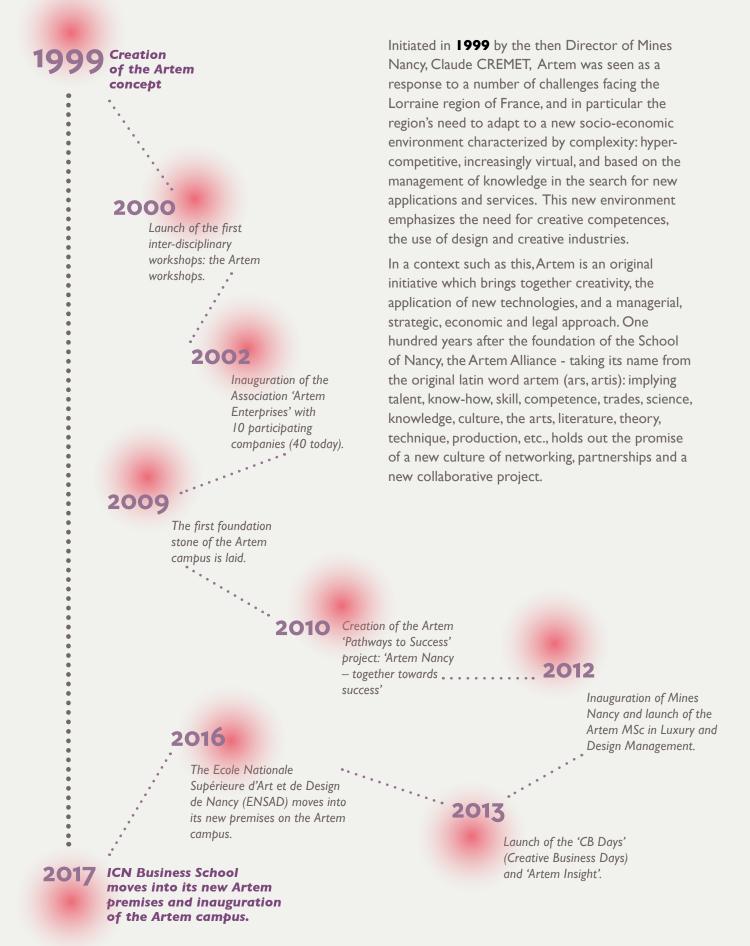
scientific research supported by 5 research laboratories: Institut Jean Lamour (Materials, Metallurgy, Nanoscience, Plasmas & Surfaces), LORIA (Computer Science & IT), IECN (Mathematics), Georessources Lab (Geology, Mineral & Energetics Resources), LEMTA (Theoritical & Applied Energetics & Mechanics).

Mines Nancy is one of the 11 Schools in the IMT (the number-one group of engineering and management graduate schools in France). The School is a member of the Collegium Lorraine INP of the University of Lorraine and a founding member of the Artem Alliance.

#### www.mines-nancy.univ-lorraine.fr



# ARTEM, 18 YEARS OF history



## Role and purpose of THE ARTEM AlliANCE

The aim of Artem is to invent, develop, apply and assess scientific, artistic, economic, social and pedagogical practices. These must generate new aspirations, and new types of professional talent and employment for the benefit of actors in tomorrow's economy and tomorrow's society. The Artem philosophy is to create, put into application and evaluate interdisciplinary practice and transcultural mind-sets for future professionals in response to tomorrow's complex and transversal world.

- interact with each other in order to enrich their teaching in multiple ways,
- bring together areas of expertise to encourage the experimentation, design and application of action programs,
- contribute to building a creative and innovative environment by collaborating with partner companies and organisations associated with the Artem Schools.

**Bringing together** engineers and managers is to prioritise dialogue between cultures, to make knowledge systems a true vector of competitivity, to construct innovation around an ethic which harmonises synergy and pedagogy, strategy and empathy.



- and differently in transversal, interdisciplinary ways,
- training decisionmakers who are involved in society at large,
- rising to the challenge of complexity, the need for transversality and for new skills and practices,
- fostering a pluridisciplinary mindset,
- exploring and exploiting the unknown,

- revealing and encouraging new talent,
- > creating confidence and trust,
- demonstrating flexibility, boldness, intuition (more intuition means more genius), curiosity and dynamism,
- thinking outside the box.



This determination to combine science, art and management can be seen in the design of the Artem campus itself. It is a site of excellence, which seeks to be the symbol of the Alliance via its own innovative practices: in terms of energy savings, technical challenges and transversal work spaces.

Committed to applying the latest developments in digital technology, the 25-acre campus has allocated the lion's share of its space to shared facilities: a teaching complex which is earmarked for interdisciplinary activities, a place for meeting and mixing, a students' building, a mediatheque, and all these linked by a single, coloured glass gallery.

By coming together on the same campus, the three Schools turn a new page in their history, still resolutely intent on promoting creativity and innovation. In fact, the shared campus will mean that they will create even more synergies, since the students, professors and support staff will be living and working together on a daily basis.



## A CAMPUS built AROUND ARTEM'S dna and SERVING The ARTEM SPIRIT

## Artem is a campus the originality of which is underscored by:

#### > the gallery

A street-like passageway which is sometimes covered, sometimes open, and which provides a new form of public space marrying all the components of the campus in a 700 meters long urban promenade. It is a thriving environment for mixing and communicating, and its proximity to Nancy city centre creates a close tie between town and gown. It is boldly aesthetic, being inspired by the spirit of the Ecole de Nancy art movement. It allies materials and forms inspired by nature: columns in the shape of palm trees, selected exotic plants enhanced by the play of light from floral and leaf effects. The gallery is a quintessence of technological innovation in the service of sustainable development, with Canadian wells, rainwater collection and a buffer against changes in climate, etc.

#### > green spaces

Each of the three Schools occupies a space between two 'streets' and backs onto the gallery. The built constructions are sited on a central 'island' and contact with the street is via a plant-filled area. Arranged in 2 x 2 formation, these spaces form a garden courtyard which is common to two Schools. Each courtyard is characterised by a dominant natural subject interspersed with other trees to create contrasts: maple trees on the south side, pine trees in the centre and oak in the north sector. Spaces occupied by more dense foliage, ponds and cooler areas have been added, particularly near the planted alleyways.

#### > The MediaTheque

The mediatheque has the special responsibility of housing the library collections of the three Schools. Substantial thought was given to this aspect, upstream of the project: it is a complete inventory of all the collections, especially that of the ENSAD Nancy, which carried out the monumental task of cataloguing the different collections tucked away in the many library rooms and archives, removing unwanted items and duplicate copies, and coordinating the classifications into an integrated management system for the brandnew, shared library.

## The centre for languages and cultures

The Centre for Languages and Cultures provides an important teaching support for the educational programs in the three Schools, and strengthens Artem's mission to contribute to life-long learning. The Centre serves the interests of the students from the three Schools, but also professional learners on post-experience programs. It was designed essentially for tutored self-learning in language laboratories, and also has a purpose-designed room for inter-cultural exchanges, special facilities for video-conferences between international partners, and other areas for collaborative work.

# construction of the Artem site

Started in 2009, it was financed by a budget totalling €102.6 million, was divided into three tranches.

1.

Mines Nancy (and the premises of INERIS), reception area, 2 large lecture halls, the Centre for Languages and Cultures

**Architects:** Agence Nicolas Michelin & Associés **18,500 m²** of floor space **€42.05 million**, including the cost of the land Completed in June 2012



#### **Financial Support:**

- French Government: €46.4 million
- Lorraine Regional Council:
   €20.3 million
- County Council of Meurthe-et-Moselle:
   €9.5 million
- Greater Nancy Métropole: €17.7 million
- FEDER: €1 million
- FCTVA: €7.7 million

ICN Business School, the
Nancy Institut Supérieur
d'Administration et
de Management-IAE,
mediatheque, 2 large lecture
halls, Students' Building

**Architects:** Lypsky-Rollet Team, with the engineering consultants Nicolas Ingénierie, RFR, exNdo studio, Thermibel and TCA.

**13,574 m²** of floor space **€37.8 million**Completed in April 2017

#### 2 ENSAD (Nancy Ecole Nationale Supérieure d'Art et de Design)

**Architects:** Helmut Dietrich, Much Untertrifaller & Christian Zomeno associate architect, together with the consulting engineers Coteba Est, Bessere and Venatec.

**8,622 m²** of floor space **€22.75 million**, including the land Completed in September 2016

## The institut jean lamour

**>** A joint research unit affiliated to the cnrs (national centre for scientific research) and the university of lorraine

With over 500 researchers, the unit focuses its research activity on materials of structures, metallurgy, nanosciences, the sciences of thermonuclear fusion and surface engineering.

The Institute has been resident on the Artem campus since 2015 and the decision to become part of an environment which promotes the complementary nature of disciplines will mean that the Institute can channel its energies into responding to the challenges of competitivity and expansion. The Institute's building was designed to house facilities which exist nowhere else in the world: a 70 meter-long DAUM tube (Dépose et Analyse sous Ultravide de nanoMatériaux - ultra-high vacuum scanning of nanomaterials), which will facilitate the development of new materials.

The facility, reflecting an investment of some €30 million, was installed in the premises of the Institute at the end of 2015 in advance of the Institute's move.

#### Institut Jean Lamour: €112.18 million

#### **Financial support:**

- French Government: €20.29 million
- FEDER: €27.14 million
- Lorraine Regional Council: €32.01 million
- Greater Nancy Métropole: €13.52 million
- FCTVA: €14.18 million
- Equipment (including the DAUM tube): €19.22 million



## **EXAMPLES OF JOINT PROJECTS**

# pioneering teaching methodology

workshops and joint teaching at the three schools:



By bringing together the different cultures of the scientist or the engineer at Mines Nancy, the manager at ICN Business School, and the artist or designer at **ENSAD, the Artem Alliance** encourages students to think in radically different ways, by immersing themselves in problems and rationales which are far removed from their original area of expertise. The intention is to encourage new forms of intellectual behaviour which are more commensurate with the complexity and the interdisciplinarity of current practice, and with the need for agility, mobility and reactivity in contemporary society, by means of transversal teaching approaches which break down the barriers between the disciplines taught at the three Schools.

## The 'cb days', or creative business days

- Each year 500 students from the three Schools are invited to experience trans-disciplinary working and thinking, when they create in groups a new company start-up.
- The CB Days were begun in 2012, and constitute an innovative teaching approach geared towards enhancing the employability of the students. As such they combine professional realism with the powerful values of creativity, team spirit, open-mindedness, curiosity and culture. Students participate regularly in the work sessions and the CB Days are divided into 4 types of workshop:
- 'Creativity' for the generation of new ideas
- 'Project and development' for seeking ways of implementing the ideas
- 'Business' for the strategic design and development of a business model
- 'Communication' for the presentation and argumentation to justify the project in front of a team of experts.

#### 2

#### **ARTEM WORKShops**

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The workshops are one of the strongest features of Artem. For one day per week, almost 650 students from the three Schools meet to work together on subjects suggested by companies, associations or local government agencies, amongst others. More than 8,000 students have enjoyed the experience of the Artem workshops since they were set up in 2000.

The themes worked on in the workshops are varied and developmental. They provide students with an opportunity to devote almost 180 hours of their degree course to working in mixed-discipline teams on transversal research problems or experiments closely linked to the local region.

#### Artem Game Lab

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Set up in 2014, Artem Game Lab is a research laboratory intended for Artem Alliance students. It involves a research exercise combined with the production of video games. The double objective means that the students need to exploit both theoretical and technical resources to devise projects linked to the games world. Students are organised into mixed working groups and create the scenarios and use the concepts associated with their game.

#### ARTEM insight

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For one week in December each year, over the last 5 years, the Artem Alliance has put its year 3 students at the service of companies so that the students can give an outside and detached view of a particular problem faced by the participating companies. Almost 80 companies have taken part in this operation.

# > specialist training:

## ICN MSc in Luxury and Design Management

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This degree program, which started in 2012, is the direct result of a collaborative initiative by the three Schools in the Alliance, each contributing with its own area of expertise. The course gives students an opportunity to study the complex nature of the luxury and design markets in a fresh perspective. Although the degree is awarded by ICN Business School, part of the program is taught as the 'Design' option of the Nancy School of Art and Design, which is piloted by the designer Jean-Baptiste Sibertin-Blanc.

#### MASTER in global design

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This two-year university Master program is managed by Mines Nancy, in partnership with the Nancy Graduate School of Architecture and ENSGSI, and in close cooperation with ENSAD. It specialises in industrial and architectural design. The Master in Global Design, started in 2005, sets out to train creators, managers, engineers and business developers to respond to the challenges facing contemporary industry.

### pioneering RESEARCh



The Artem Alliance's research platform includes thirty lecturers and researchers from the three Schools. All research activity is designed to emphasize the concept and the practice of transversality. The research group has, since 2011, developed a series of study days devoted to three problem areas which cross the boundaries of their individual disciplines to create a common boundary: the issue of work, performance and creativity, and risk and uncertainty.

## > RESEARCH AND TEACHING

#### The National Workshop on Typographical Research (Atelier National de Recherche Typographique or ANRT)

This is a 3rd cycle university research program set up in 1985 by the French Ministries of Culture, Economy and Budgetary Finance. It is organised by the National School of Art and Design as an Artem Alliance transdisciplinary project dedicated to research into typographical design.

#### Offshore teaching in Shanghai (People's Republic of China)

The offshore School at Shanghai, established in 2013, delivers a research program created and developed by ENSAD as part of its contribution to Artem. This 'out-sourced' post-Master program resulted from a partnership with the Shanghai Institute of Visual Art (SIVA) and the Rockbund Art Museum, also at Shanghai.

#### > RESEARCH days

The Artem Alliance arranges regular meetings for discussion and making contact, as part of the overall aim of organising colloquia and conferences on the theme of transversal teaching.



## ARTEM ENTERPRISES AT THE SERVICE of the economy and the region

The 'Artem Enterprises' Association, made up of 40 companies, contributes actively and financially to the cross fertilization of knowledge and practice, supporting the three Schools in their different projects.

The companies see in this model of pluridisciplinary education an answer to the way in which jobs are changing and therefore an added value in terms of students' entry into the work force. More committed than ever to the Artem initiative, Artem Enterprises is now present on the Artem campus where an entrepreneurship area has been allocated to them. This strengthens the proximity of students and lecturer/ researchers to the companies, which have first-hand knowledge of the latest needs of business and the economy.

#### stand up-artem incubator

ENSAD, ICN Business School and Mines Nancy wanted to develop a project which would mean dedicating an area of the campus as an incubator to facilitate the transition from education to work for the students.

Called Villa Artem, its purpose will be to accompany new enterprise start-ups or projects already in the development phase, in which creation and creativity play a predominant part.

In order to complete the design of Villa Artem, which should be operational by 2019, the three Schools decided to set up immediately a different kind of incubator, called Stand Up-Artem. This means that, over the next two years, a selection of students and graduates who already have an enterprising project will be provided with the appropriate material conditions in which to develop their project and/or their business start-up, and therefore benefit from the advantages of the Artem ecosystem.



## A COMMITMENT TO SERVICE TO THE COMMUNITY

#### > pathways to success ("la cordée de la réussite")

Since 2010, the three founding Schools in the Alliance have been participating in a joint project called 'Artem-Successful together' (Ensemble vers la réussite), one of a national network of such projects called 'Pathways to success'. Of the almost 400 'Pathways to success' projects in France, the Artem initiative is unique in being the only multidisciplinary project, involving a School of Art and Design, a School of Management and an Engineering School.

#### Agora: conferences, debates and exhibitions open to the general public

Since 2008, the Artem Alliance has, on a regular basis, been inviting personalities with international reputations to share their original thoughts and perspectives on the world and its strategic challenges. These conferences are ideal moments for exchanging and sharing views, for informed criticism and for disseminating new ideas, not only for Artem students, but also for the general public.

## > ARTEM CELEBRATES SCIENCE!

To highlight the research dimension of the Artem project, Mines Nancy, the LORIA, GeoRessources and the Institut Jean Lamour have come together to organise a program of discussions and demonstrations around 4 major themes: materials, art and design, information technologies and mathematics, and energy and geosciences. These take the form of half-day sessions, one intended for secondary and high school pupils and the second open to the general public. To date there have been 3 such events and they have attracted no less than 4,500 visitors to some 80 scientific workshops.

### **ARTEM**







See annexe for details of joint projects.

**ANNEXE** 

# pioneering approach To TEAching

## The common core

#### > ARTEM WORKShops

By bringing together different cultures - the culture of the scientist or the engineer from Mines Nancy, the culture of the manager from ICN Business School and the culture of the artist or the designer from the Nancy National School of Art and Design - the Artem Alliance invites students to think in radically different ways by placing them before challenges and ways of reasoning that are far removed from their original specialist field. The aim is to encourage different forms of intellectual behaviour which are more appropriate for the complexity and the interdisciplinarity of current practice, and more suited to the need for agility, mobility and reactivity in contemporary society, by means of transversal teaching approaches which break down the barriers between the disciplines taught at the three Schools.

#### **FILE DESCRIPTION**

Date created: 2000

**Students**: Mines Nancy (Master I Mines Civil Engineer,) ICN Business School (Year I Master in Management), ENSAD (Master I and 2 of main program), i.e. a total of more than 500 per year

**Faculty**: about 25 Faculty members per year **Student work load**: 180 hours per year **Languages used**: French and English

**ECTS credits**: 8 to 10 ECTS credits, depending on

the School



The Artem workshops are a shared teaching component of the 3 Schools' programs. They are real laboratories for ideas and discussion centres where students from the three Schools in the Artem Alliance can learn to work together and appreciate their differences.

The workshops take place on one full day each week throughout the whole academic year and include substantial time for student team work. They are also open for companies to release their expert staff as lecturers and suggest subjects of study or practical projects for the student participants.

Each year between 2010 and 2016, the Association Artem Enterprises has rewarded the best projects resulting from the Artem workshops and carried out by students from the three Schools as part of the 'Startem Challenge'. The aim is to provide an opportunity for students

to have their work recognised by means of a modest financial support. The projects are judged by a panel of experts and by the general Artem public. The challenge demonstrates the innovative nature of Artem teaching, based as it is on the transversal or interdisciplinary character of the workshops.

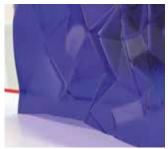
In 2016-2017, 24 such workshops were operational. This means that since 2000, there have been more than 350 workshops, with more than 8,500 students participating. This has also led to more than 150 patents being registered, over 30 publications being accepted, and more than 30 exhibitions held.

#### Glass Room Workshop (ENSAD) between 2014 and 2016

Glass Room explores the material glass, on the one hand in all its multiple applications, both industrial and hand-crafted, and, on the other, through the transversal approach to its utilisation in architecture, design and artistic production. The discovery of a number of major techniques (hand-blown glass, glass paste, glass casting) and secondly, work with sheet glass (thermoforming, fusing, glass bending, etc.) encourages students to rise to the challenge of different spatial problems.

The Glass Room was awarded the Startem Prize in 2014 and 2016 and led to the organization of an exhibition on 18 March 2016 and to the publication of a 'Glass Room Journal'.







#### ..... Annexe > pioneering approach to teaching .....

#### The 'Cindyniques' (Sciences of Danger) Workshop (Mines Nancy)

The aim of this workshop is to provide students with methodological tools for them to be able to appreciate and assess risks in tomorrow's uncertain and complex world.

The **iCrisis Project** consists in developing firstly an organisational resource, and secondly a technological resource to exploit the internet, in order to manage and analyse crisis situations.

The project has already led to the development of the preliminary version of the iCrisis software subsequently taken up as part of a project for the government Ministry for the Environment. The software is now into its 3rd version and continues to be used and developed. Some fifty crisis simulations

have been enacted for different training programs for engineers or for engineering institutions such as Mines Nancy, Mines St Etienne, INSA Rouen, IRA Metz, ENTPE Lyon, Université d'Orsay, The Rector's Office in Corsica, the Office of the President of the University of Lorraine, the local town or village councils of Essey, Saulxures, Seichamps and Pulnoy, the Turkish Ministry of the Environment, the Foresa company, etc.).

See the video presentation at: <a href="http://bit.ly/">http://bit.ly/</a>
<a href="http://bit.ly/">icrisis1</a>

On 19 November 2015, the municipal authorities of Esseylès-Nancy, Seichamps, **Pulnoy and Saulxures**lès-Nancy, together with Greater Nancy council and the Prefect's Office participated in a crisis simulation exercise organised for them using the iCrisis software. For the main organisers, professor Thierry VERDEL (Mines Nancy) and his team, the aim was to test the capacity of the authorities involved to collaborate together in the case of a catastrophic event occurring on their territory, an event such as the floods that they experienced in 2012. The objective was to assess the effectiveness of the measures set up to protect local populations.

#### Workshop 'Doctors and Managers 2014-2017' (ICN Business School)

**NENOBase** is a unique creation, resulting from the work of interdisciplinary teams who have been working together in this workshop since 2010, in conjunction with doctors specialising in the field of brain tumours.

The aim is to create a tool which will enable doctors and health workers to trace the complete medical history of a patient's care, by providing more comprehensive, more varied and more reliable data, which is also more rapidly accessible. The tool, which will also mean more security for the patient, will lead to improved health care in the future.

Through this project, students have, with the help of practising experts and academics, been able to demonstrate their own ability to think creatively, to take initiatives, and all this in an interdisciplinary way.

More generally, the NENOBase is an information system which could be used by large companies' security engineers to follow up the responses to industrial risks. Amongst other things, the general concept could be applied to quality assurance studies in large commercial concerns, particularly when handling very complex data in the areas of process standardisation.

# See the video presentation at: <a href="http://bit.ly/atelierMM">http://bit.ly/atelierMM</a>

The video provides an accurate account of the workshop's actions to date and will provide a useful tool in assuring continuity for the next cohort of students on the 2016 intake. In the video clip, Professor Luc TAILLANDIER, reminds students of the aim of the project, and the practical applications which the NENOBase serves, and he explains the close link which exists between the student workshop and the NENO group: 'Improving the quality of life of patients, and improving the medical treatment of brain tumour patients, at both regional and national levels.'

#### > The cb days

#### FILE DESCRIPTION

Date created: 2012

**Students**: Mines Nancy (year I of Civil Engineering Degree, and Materials and Production Engineering Degree), ICN Business School (year I of Master in Management Degree), ENSAD (year 3 Design Option), i.e. more than 500 per year

Faculty: 20 Faculty members Student work load: 5 days Languages used: French

**ECTS credits**: I or 2 ECTS credits, depending on

the School



The 4<sup>th</sup> edition of the operation took place during the week 26 to 30 September 2016 and, out of 11 projects nominated for awards, 3 were finally awarded prizes:

'HandX'Trem': the organisation of extreme sports breaks for handicapped persons. This was awarded First Prize by the Grand Nancy Metropolitan Authority.

'RISAD': social reemployment and sustainable food provision: insect breeding by unemployed persons to meet the challenge of food shortages. Second Prize, awarded by Artem Enterprises.

'Smart light': promoting the rational utilisation of urban lighting. Third Prize, awarded by the Lorraine national Opera. The **Creative Business Days**® bring together more than 500 students from the three Schools for one full week's activities. Lecturers from Mines Nancy (designers, computer scientists, engineers, physicists, etc.), from ICN Business School (financial, legal, corporate strategy, and marketing experts, etc.) and from ENSAD (designers, communicators, exhibition organisers) accompany first year students in a company start-up project. The project must respect the ethos and ethics of corporate social responsibility (CSR).

The CB Days are divided into 4 modules, each of which involves a  $\frac{1}{2}$  day's group work on site, followed by a  $\frac{1}{2}$  day's independent work off site:

- Module I: 'Creativity and Design' for generating new ideas
- Module 2: 'Business' for the strategic conception and development of a business model
- Module 3: 'Project and Development' for ways in which the ideas generated might be implemented
- Module 4: 'Communication' looks at ways in which the project could be presented and justified before a panel of experts

The best presentations are rewarded with a prize, which is announced at the end of the exercise.

#### ..... Annexe > pioneering approach to teaching ......

#### > ARTEM insight

#### **FILE DESCRIPTION**

Date created: 2012

**Students**: Mines Nancy (year 3 Civil Engineering Degree, and Materials and Production Engineering Degree), ICN Business School (year 3 Master in Management Degree) and ENSAD (year 3 Option: Design and Communication), i.e. more than 500 per year

**Faculty**: 30 Faculty members **Student work load**: 5 days **Languages used**: French

ECTS credits: I or 2 ECTS credits, depending on

the School

The **Artem Insight**® workshop involves final year students from the three Schools in the Artem Alliance. Students, within a team of 8, test their ingenuity and creativity against a real problem set by a company, a local authority, a start-up, an association or any other partner seeking a fresh, interdisciplinary look at one of its projects.

For the students, it means coming to grips with the problem, identifying an appropriate means of analysing it, putting it into context, and finally making recommendations as to a solution.

It is a win-win operation, which is totally consistent with the Artem Alliance's objective of involving companies in its teaching and contributing to general economic development. To date, some 80 companies or organisations have participated in the operation.



The 4<sup>th</sup> edition of Artem Insight took place between 28 November and 2 December 2016 with 35 enterprises or organisations participating and 40 projects put before the students.

New in 2016: Partner organisations, students and lecturers were, throughout the week-long exercise, able to make use of the I.T. project 'Waza Education', produced by the first Artem start-up created by Salah GHAMIZI, a graduate of Mines Nancy. This digital platform, providing an interface between university and enterprise, is in every respect a reflexion of the aims of the Artem Insight philosophy, in that it promotes collaboration and it facilitates the development of multicompetence projects.

In this way Artem Insight has become the showcase of teaching innovation, exploiting the special know-how of Mines Nancy / Alliance Artem in real, life-size situations.

# specialist training programs

#### > ARTEM GAME lab

#### FILE DESCRIPTION

Date created: 2014

**Students**: Mines Nancy (year 2 of Civil Engineering Degree), ICN Business School (year 2 of Master in Management Degree), ENSAD (year 2 students), i.e. about 15 students per year in total

Faculty: 2 Faculty members

Student work load: 5 days

Languages used: French

**ECTS credits**: I or 2 ECTS credits, depending on

the School









with the public.



Artem Game Lab is a laboratory for research and experimentation into the subject of games, particularly video games. The emphasis is clearly on experimentation, production and research in a number of fields: aesthetics, scenarios, playability and gameplay, user experience, interfaces, transmedia, addiction,

sociability, teaching methods, 'serious games', etc.

The Artem Alliance has led to the creation of one of the rare examples of interdisciplinarity and complementarity between three Graduate Schools in the field of video games in France. The Game Lab is at the meeting point between two worlds: arts and sciences, and as such constitutes a totally new discipline with its own fairs and salons, its specialist publications and its teaching.

For a complete semester, students from ENSAD and Mines Nancy (to be joined by students from ICN Business School in September 2017) work together on the production of video games.

The students are divided into mixed groups and design the concepts and scenarios behind their games. The workshops are spread over a number of days on a weekly basis. The rhythm is regular and intense! Students from Mines Nancy encode the games, while students from ENSAD create the characters, animate them and design the worlds in which they will operate.

# MSC degree in luxury and design MANAGEMENT

#### FILE DESCRIPTION

Date created: 2012

**Students**: Students holding Bac+3/+4 qualification (3 or 4 years of university education) and practising professionals, i.e. approx. 20 students per year

Faculty: 50 Faculty members

Student work load: 4 semesters

Languages used: English

ECTS credits: 180 ECTS credits

This Degree course is the result of a cooperative venture between the three Schools, each contributing its own specialisations to the study of the complex markets of luxury and design in a different way. **Originally an ICN Business** School idea, the course is now jointly taught with the Design option at the ENSAD, and supervised by the designer Jean-Baptiste SIBERTIN-BLANC.

## This original course will enable its future graduates to:

- understand the whole value chain in the luxury sector, from conception, via the phases of design and production, to the finished product,
- become skilled negotiators for the creators of luxury products and services,
- advise manufacturers on the basis of discussions with the designers,
- define marketing, sales or purchasing strategies, mindful of the cost imperative.

#### Presentation of Chanel





Presentation of S.T. Dupont

#### The aims of the course are as follows:

- develop the skills and expertise necessary for understanding and anticipating developments in the luxury and design markets,
- set up commercial, marketing and communication strategies, as appropriate for members of the luxury professions,
- acquire a design culture, along with the history of design, its understanding of materials, its role in the luxury industry, its skills and its applications, and using the links which exist between marketing and creation,
- appreciate the international business environment in order to promote products, particularly on new, expanding markets.

# > MASTER degree in global design

#### FILE DESCRIPTION

Date created: 2005

**Students**: Holders of Bac+3 qualification (3 years university education). Available as a first Degree program, as a Post-experience course or as part of an

apprenticeship/sandwich scheme **Faculty**: 60 Faculty members

Student work load: 4 semesters

Languages used: English ECTS credits: 180 ECTS

Developed by Mines Nancy in partnership with ENSAD and ENSGSI, this 2-year university Master course focuses on Industrial and Architectural Design.

It includes a Master I component organised into 4 teaching blocks: Design and Project, Design and Materials, Design and Systems, and Design and Image. In Master 2 (year 2), 4 specialisations/majors are offered: Major in Product Design (Conception geared towards products, processes and materials),

Major in Glass and

Architectural Design,
Major in Architectural
Modelling and the
Environment, and Major in
Innovation Management
and Industrial Design.

The aim of the course is to train creators, executives, engineers and developers, to respond to the challenges of the world of industry.



The accreditation of this Master course is in the process of renewal for the September 2018 intake, in the category 'Master in Design'. It is taught by the University of Lorraine and its different Schools (Mines Nancy and ENSGSI), ENSA (Ecole nationale supérieure d'architecture) and ENSAD. After the year I Master I program, during which students are trained in the main subjects, students can choose one of the 5 routes, the aims and objectives of which are as follows:

- IDEAS Route: Innovation and Design and their Applications (taught by ENSGSI),
- PC Route: Product Conception (taught by InSIC and Mines Nancy),
- VDA Route: Glass, Design, Architecture (Verre, Design, Architecture) (taught by ENSA Nancy),
- DAM Route: Design, Architecture and Modelling (taught by ENSA Nancy),
- DM Route: Design and Materials (taught by ENSAD Nancy, Mines Nancy and InSIC)

# pioneering research

The Artem research platform includes almost thirty lecturers and researchers from the 3 Artem Schools, and concentrates its research on the interdisciplinary or transversal character of issues and problems.

Since 2011, research activity has taken the form of study days, focusing on three problem areas which share this commonality of approach, and which represent the research platform's pioneering dynamic: issues associated with work, issues of performance and creativity and issues concerning risk and uncertainty.

In 2016, the review Milieux et créativités was published, based on a series of seminars. Its objective is to analyse the emergence of new practices in which artists, designers, graphic artists, architects and researchers can work together and in direct contact with the different economic and social communities.

With contributions from Bernard STIEGLER, Nelly BEN HAYOUN, Jean-Marc BULLET, Marie-Claude CARAËS, Jochen GERNER, Julien PREVIEUX, amongst others.

## RESEARCH days

# > 'performance and creativity: a question of gender?'

9 April 2015

Raising the question of gender often means vacillating between two attitudes. At times we defend it, in the name of gender equality, as an asexual conception of the individual and society. This runs the risk of ignoring the reality of the inequalities and the power relationships which exist between the sexes and which can be seen in different forms of social interaction. At other times we defend the differences between the sexes, and here we run the risk of creating new pressures and constraints on individuals which are even more difficult to avoid.



### > « nouvelles manières de refaire » ('new ways of re-doing things')

29 October 2014

This research day sets out to review the initiatives taken by the different partners of ENSAD, in terms of new collaborative practices in fablabs and prototyping.

# « Risques et incertitudes » ('Risks and uncertainties')

15 March 2013

Setting up a discussion group looking at risk from many different angles.

Firstly, identifying, assessing and controlling risks, whether technological or natural, are everincreasing concerns of technological companies. They require multiple skills, knowledge deriving from numerous and varied disciplines and an ability to understand and analyse the complex, global systems which confront society on a daily basis.

# « ESPACES ET divisions du TRAVAII » ('working space and division of labour')

7 & 8 February 2013

Based on the idea that work space is also a physical factor of working activity and that it is this that makes work possible, the day provided an opportunity to the explore new, emerging patterns of working, e.g. new collective practices and informal practices such as co-working, fablabs, nomad communities, etc., re-affecting work spaces (occupying workshops or offices by artists and designers), and innovative work practices, such as virtual work spaces, nomad or kit-form work spaces, video-conferences, etc.



The Artem Alliance has set up regular meetings for discussion and debate, the objective of which is to create conferences and colloquia which will become reference points in transversal teaching.

# ARTEM OCC 2015: 1<sup>ST</sup> ARTEM INTERNATIONAL CONFERENCE ON ORGANISATIONAL CREATIVITY

26 & 27 March 2015 at Nancy

The conference was structured around 5 major themes: 'Creativity and Sustainable Development', 'Creativity and Initiatives in Environment Management', 'Creativity, Aesthetics and Management', 'Creativity and Innovation' and 'Teaching Methodologies: Creative approaches to Learning'.

The 2<sup>nd</sup> edition of this conference will be held on 14-16 September 2017 on the Artem campus at Nancy and will take as its general theme: 'Facilitating Sustainable Development through a variety of Creative Approaches'.

# RESEARCH-based learning

### > national workshop on typographical research (anrt)

The Atelier National de Recherche Typographique (ANRT) is a 3<sup>rd</sup> cycle research qualification from ENSAD which, as a trans-disciplinary project in typographical design, fully reflects the objectives of Artem.

The ANRT was set up in 1985 by the Ministries of Culture, the Economy, Finance and the Budget, with the specific aim of 'contributing to the development of typographical creation'. It was installed initially at the Imprimerie - Nationale (National Printing Office) with the title Atelier National de Création Typographique between 1985 and 1996, then at the Ecole Nationale Supérieure des Arts Décoratifs de Paris, from 1996 until 1999, and finally, since the year 2000 it has been located at ENSAD, Nancy.

Between 1990 and 2006, under its Director Peter KELLER, the ANRT was host to a hundred

or so researchers, who contributed to developing French typographical creation and organising its teaching in the national network of Schools of Art and design.

Now installed on the Artem campus as part of the Nancy ENSAD, it enjoys the advantages accruing from proximity to the research teams at Mines Nancy and the LORIA, its supporting laboratory in Information Technology.



After a pause of six years, the workshop opened its doors again in Nancy in 2013, with a new Director Thomas HUOT-MARCHAND, a new project and a new team, which included André BALDINGER, Roxane JUBERT, Jérôme KNEBUSCH, Charles MAZE, Philippe MILLOT, Émilie RIGAUD, and Alice SAVOIE as professors.

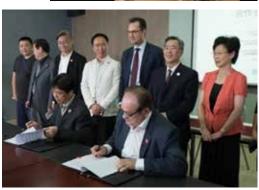
### offshore school at shanghai

The Offshore School at Shanghai, created in 2013, is a research program initiated end developed by ENSAD Nancy as part of its contribution to Artem. This 'off-campus' post-Master program was set up as part of the partnership between the Shanghai Institute of Visual Art (SIVA) and the Rockbund Art Museum of Shanghai.

The Offshore School, located in one of the world's most dynamic cities, Shanghai – a megalopolis of some 20 million people which is typical of the activities and processes of globalisation and a particularly attractive environment for the world's creative artists – aims to develop a program which will become a reference for the challenges set by creation in a global context.

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## A MONTH A



The program 'Creation and Globalisation' is based on sustained interaction between individual research and collaborative situations in the context of creative projects developed in Shanghai. It has four main objectives:

- invent and experiment with new strategies for innovation in a world characterised by networking and a global economy,
- imagine and test Art as a major player in a knowledge-based society,
- analyse and anticipate cultural and intercultural changes generated by the new technologies, and
- identify the aesthetic challenges arising from a globalised culture.

The Offshore School's research program is open to all students holding a Master's qualification and to artists and researchers from all Schools of Art in France who would like to continue their studies in an environment which is open to the challenges of global art and where they will be working with international students under the guidance of visiting artists and teachers (Chinese and others).



# ARTEM by and for Enterprises

### **ARTEM ENTREPRISES**

# > AT THE SERVICE OF THE ECONOMY AND THE REGION

The 'Artem Enterprises'
Association, made up of
40 companies representing the
regional ecosystem, contributes
actively and financially to the
cross fertilization of knowledge
and practice, supporting the three
Schools in their different projects.

The companies see in this model of pluri-disciplinary education an answer to the way in which jobs are changing and therefore an added value in terms of students' entry into the work force. More committed than ever to the Artem initiative, Artem Enterprises is now present on the Artem campus where an entrepreneurship area has been allocated to them. This proximity strengthens the relationship between students, lecturer/researchers and the companies which have first-hand knowledge of the latest needs of business and the economy.

## Student statement on the added-value of working in multi-disciplinary groups:

Claire BALDECK, ENSAD Nancy Graduate (Department of Design) in 2015

'The CARE workshop was the setting for a particular partnership for me with a Special Care Home, 'La Maison d'Accueil Spécialisée Le Chêne', in the town of Cuvry in the county of Moselle, and a first opportunity for me to work in a medical service. I was therefore able to build a special relationship with the residents, who had Huntington's Chorea, a hereditary and incurable degenerative illness, and with the care team and the residents' families. I was also able to appreciate a wide range of relational situations and problems, and come to understand the most effective method of treatment, which turned out to be the approach giving most attention to detail.

The CARE workshop meant that I could relate this 'field work' to a range of references and reflexions that we had discussed in class and during the meetings we had with invited guests. It also enabled me to finetune the path leading to my degree project, and even after graduation, because I am now following this project with other students who are also involved in specific field work with the Care Home 'Le Chêne'.

# Statement from a recruiting manager on the contribution that Artem makes to employability Patrick VINCENT-GENOD, Partner at EY

"Each year we recruit a dozen or so students who have graduated from Alliance Artem courses, both engineers from Mines Nancy and managers from ICN Business School. The Alliance is a real advantage in that it develops students' skills in collaborative team working, which is vital for working with EY.

In fact, we are looking for colleagues who are good at team work, who can quickly get to grips with an environment which is often quite complex, and who can provide innovative solutions for our clients' needs. In the end, it is their open-mindedness, their mental agility and their ability to work in areas which are not necessarily their own, which makes Artem students distinctive, and which we value here in the multi-disciplinary and international environment of our company EY. In reality, our employees come from Engineering Schools or Management Schools, and our team-working approach is very close to Artem's."

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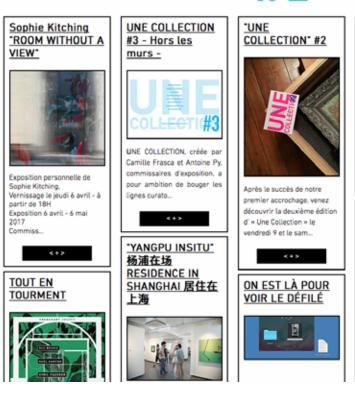
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# STAND UP-ARTEM INCUBATOR

**ENSAD, ICN** Business School and Mines Nancy wanted to develop, as part of the Artem Alliance, an incubator project, to be called Villa Artem, which would facilitate the transition from education to work for the students. Its purpose will be to accompany new enterprise start-ups or projects already in the development phase, in which creation and creativity play a predominant part. In this way, graduates and student-entrepreneurs who have an original and creative project, which embodies the Artem spirit, will find a first-class professional environment and all the resources necessary to launch their project.

# COL CAMILLE FRASCA & ANTOINE PY #3



As a pre-cursor to the Villa Artem, which should be operational by 2019, the three Schools decided to set up immediately a new kind of incubator, called **Stand Up-Artem**. This benefits from special financial support from the Ministry of Culture and Communication and the Grand Est Regional Council.

It means that, over the next two years, a selection of students and graduates who already have an enterprising project will be provided with the appropriate material conditions in which to develop their project and/ or their business start-up, and hence benefit from the advantages of the Artem ecosystem. Stand up-Artem will accompany these students by providing support such as structure, advice and finance during the first stages of their new professional venture.

# MARDI 21 JUIN 2016 LANCEMENT DE L'INCUBATEUR STAND UP - ARTEM

# > The mission of stand up-artem has three main strands

- to encourage innovation: fostering innovation means creating new and differentiating value (whether this is artistic, technological, managerial, social, economic, or societal), and production and work methods which are original and of high quality,
- to promote entrepreneurial excellence: this implies a commitment to permanent economic, collaborative and human development, prioritising professionalism and excellence, and
- to contribute to the advancement of the Artem philosophy and its eco-system.

# > STAND UP-ARTEM WAS inaugurated on 21 june 2016 with three new projects



Aliénor MORVAN, Graduate from the Design option at ENSAD Nancy, with her project: 'M.O.T.E.' (Matière Organique Très Expressive)

M.O.T.E. is a process of shared composting in urban areas. It is based on an immersive survey in one of the districts of Greater Nancy, and concerns the treatment of organic waste at a local level. The project, which combines aspects of creativity, innovation, technology, management and marketing, is a perfect example of the Artem philosophy.



Youssef SRIKAH, Graduate from ENSEM Nancy (School of Engineering) and a student at ICN Business School, with his project: 'Energy Design'.

The project consists in developing a new generation of energy production by means of a solar textile. This involves combining materials and photovoltaic cells to provide a practical and autonomous solution to solar energy production. The initiative combines science, technology, marketing, design, etc. has an obvious Artem dimension.



Antoine PY, Graduate from the Art option at ENSAD Nancy, with his project 'FrenchArt'.

The concept is to create an agency which will accompany young artists making their first appearance on the international art market. 'FrenchArt' will be a management platform which will combine art and management in order to meet, accompany and advise artists during their early career, from communication of their work to the commercialisation phase.

#### > exhibitions organised by french art since june 2016 include

#### 'In a whirl' (Tout en tourment)

Carré de Vincennes

This exhibition can be seen as theatre ... and the other side of its decor. In other words: the portrait of a generation of young artists and their innermost concerns. This reveals much about the preoccupations of the artists, the meaning behind the object, behind the canvas, via the materials.

Artists: Ely BESSIS / Gaël CANTON / Cyril FAUCHER / Margaux SIMONETTI / Justin WEILER / Gaoshan

Commissioner: Camille FRASCA



A co-production by Half Image and FrenchArt

Shanghail 88, Kangnai Linqing Road, Yangpu, Shanghai, Chine

#### A collection

'Artists we follow, meetings, moments, together in our space. A collection in movement, a chance meeting, one evening. The desire to present an intimate collection of works in a moment shared together'.

Artists: David ANCELIN, Sophie KITCHING, Alice LOURADOUR, Margaux SIMONETTI, Martin RAHIN, Mateo REVILLO, Justin WEILER

Curators: Camille FRASCA and Antoine PY





#### A collection #2

Following the success of our first showing, come and see the second edition of 'A Collection'.

Artists: Léa BLOT, Arthur BOUET, Cyril FAUCHER, Harald FERNAGU, Gaoshan, Sophie KITCHING, Martin RAHIN and Mateo REVILLO.

Curators: Camille FRASCA and Antoine PY



Aliénor MORVAN. who created the association MOTE. was allocated a first islet at Laxou-Provinces community centre and was awarded the FLORE 54 environment prize for her project MOTE. A similar event is taking place at Villers-lès-Nancy.

# A COMMITMENT TO SOCIETY, And beyond

## pathways to success (cordée de la RÉUSSITE)

Since 2010, the three founding Schools in the Alliance have participated in a joint project called 'Artem-Successful together' (Ensemble vers la réussite), one of a national network of such projects called 'Pathways to Success'. Of the almost 400 'Pathways to Success' projects in France, the Artem initiative is unique in being the only multidisciplinary project, involving a School of Art and Design, a School of Management and an Engineering School.

The Artem Pathway represents the whole of the Lorraine region, from Forbach in the north to Nancy in the south. It has been running for 6 years and has a budget of 540K euros. To date it has been able to make 7,894 school pupils aware of the challenges and opportunities of higher education. It has involved 574 students from the three Artem Schools (156 students from ENSAD Nancy, 147 students from ICN Business School and 271 from Mines Nancy). The dynamic nature of the Artem Pathway has meant that it has attracted financial support from the government's Ministry for Urban Development to organise the 'First National Convention of Pathways to Success' held at the Artem campus, Nancy in 2012. Over the last five years, the Artem Pathway project has also held an annual 'Pathway Awareness Day', to introduce pupils to the idea of entrepreneurship. The aim here is to sow the seeds of interest in entrepreneurship in the minds of this young audience and, via contributions from experienced company directors and managers, to demonstrate that there is no glass ceiling in enterprise and entrepreneurship. In 6 years the Artem Pathway

has successfully forged links with partners in commerce and industry (companies and associations such as Bouygues Bâtiment Nord Est, Deloitte, Passeport Avenir, Entrepreneuriat au Féminin, Elles bougent) and for the last 3 years has developed a specific program 'Handicap' as part of the national initiative 'PHARES'.

The Artem Pathway includes 14 member schools (9 middle schools and 4 high schools in Lorraine, and the Nicolo High School in Guadeloupe). It is supervised by 3 project leaders, 3 local authority departments, the student association 'Artem Réussite', and a number of student tutors.

# > visit to stuttgart by the artem pathway team with 30 pupils from the jean de la fontaine secondary school at laxou, nancy

On 4, 5 and 6 May 2016, 30 pupils (11 to 16 years old) from the Jean de la Fontaine secondary school, accompanied by 3 Artem students, visited Stuttgart as part of the Artem Pathway project.

The aim of the visit for the Jean de la Fontaine school was, amongst other things, to maintain the interest in German language learning at the school. It was also an additional opportunity to reinforce the links between secondary pupils and higher education students via cultural and more social activities than the classic teaching situation. Over the three days of contacts, not only between pupils and students but also between the pupils and the local inhabitants, accommodation was provided by Stuttgart families. The full program of visits included: a visit to the town of Stuttgart, the botanical gardens and the zoo, the television tower, the Ritter museum, the Mercedes museum, the Ritter chocolate factory, the museum of automates, and the ZKM Arts and Media Technologies Centre at Karlsruhe.



# Agora: conferences, debates and exhibitions open to the general public

Since 2008, the Artem Alliance has, on a regular basis, been inviting personalities with international reputations to share their original thoughts and perspectives on the world and its strategic challenges. These conferences are ideal moments for exchanging and sharing views, for critical assessment and for disseminating new ideas, not only for Artem students, but also for the general public.

# > some examples of invited personalities

- Aldo CIBIC, Architect-designer, as part of Start+ 2016
- Daniele LAGO, Designer, as part of Start+ 2015
- Dominique MEDA, Philosopher and Sociologist, speaking on 'The Mystique of Knowledge'
- Antonio CASILLI, Specialist in the Sociology of Networking, Senior Lecturer in Digital Humanities at Telecom ParisTech, on the subject of 'Trolling, the reverse of Digital Civilisation'
- Maurice BENAYOUN, Plastic artist in digital art, curator and French thinker, leading a discussion on 'Can we invent, create and model territorial space?'

### > close-up of guido, our robot guide at the museum of modern art in luxembourg

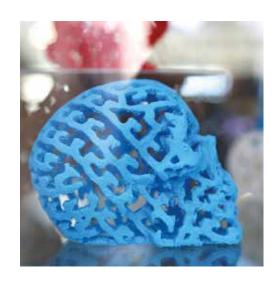
The robot Guido, a genuine interactive creation, designed and developed by students in the 'We are the robots' workshop, in conjunction with the artist Paul GRANJON, played the role of a cultured but mischievous guide for visitors to the Museum of Modern Art in Luxembourg as part of the exhibition 'Eppur si muove (And yet it turns). Art and Technology, a shared space'.



# ARTEM CAlebrates science!

To highlight the research dimension of the Artem project, along with its concern for transversality, Mines Nancy, the LORIA, GeoRessources and the Institut Jean Lamour have come together to organise a program of discussions around 4 major themes: materials, art and design, information technologies and mathematics, and energy and geosciences. These take the form of half-day sessions, one intended for secondary and high school pupils and the second open to the general public. To date, there have been:





- 3 editions
- 80 science workshops
- 10 conference-debates and presentations with research Faculty
- 4.500 visitors
- 1,500 visiting secondary and high school pupils
- 170 researchers, lecturers and students involved in the organisation
- organisation: Mines Nancy, Institut Jean Lamour, GeoRessources, LORIA

The 3<sup>rd</sup> edition took place on 14, 15 October 2016 with almost 2,000 visitors, illustrating the increasing success of the project.



# for further details, visit the following sites:

- www.alliance-artem.fr
- > www.facebook.com/AllianceArtem
- > twitter.com/AllianceArtem
- www.linkedin.com/company/alliance-artem









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