Breviary of the Roberto Garza Sada Center
The Roberto Garza Sada Center of Art, Architecture and Design (CRGS, according to its initials in Spanish) is a space in Universidad de Monterrey (UDEM) devoted to the development of creativity, innovation and appreciation of aesthetics.

It is the first public work in Latin America of its creator, Tadao Ando, and is also the first of all to have LEED certification for this famous Japanese architect, laureated in 1995 with the Pritzker Prize.

This architectonic piece, named by its author as *Gate of Creation*, pays tribute to the name of prominent businessman and philanthropist from Monterrey Don Roberto Garza Sada.

The CRGS has been recognized nationally and internationally, as well as being seedbed of great artists who from his early university education have shown their remarkable talent.

This center is the result of the generous contribution of many individuals and organizations, starting with the descendants of Don Roberto, in a bid to move from the “Made in Mexico” to the “Designed in Mexico”.

Located west in the UDEM campus, this huge building rests on two points and is secured in its inside steel column. Its flat exterior harbors countless redoubts formed by hard concrete forged in soft-touch blocks, whose straight lines add, incredible as it seems, sinuous curves.
The opening of the Roberto Garza Sada Center marks the emergence of a new era for the Universidad de Monterrey.

The essential transformation, which brings us to a beginning stage, is that this new perspective, in which we recognize the aesthetic character of value, is present in all university activities. Creativity and innovation are key elements that define the skills and competencies with which we train our students.

Eng. Victor Zorrilla Vargas
President of the Board
of Universidad de Monterrey

"See how the foundations of a building of the size and importance of the Roberto Garza Sada Center were done is a remarkable opportunity in life. But of equal importance has been witnessing how the foundation on which the unique educational model arose, with which Universidad de Monterrey proposes the development of the most prominent artists in the fields of art, architecture and design. This bold design is also a constant reminder of the importance of innovation and creativity for the development of both science and art."

Antonio J. Dieck Assad, PhD
President, Universidad de Monterrey

"The Roberto Garza Sada Center takes shape from a dream; a dream that comes from my father from who endowed me his love for art, architecture and music. What was a dream, a desire and a memory is now a reality. The vision of my father will be present and will be renewed with each generation of students entering UDEM. The Center is more than a building; it is a gateway to knowledge and a crucible for creativity. The nobility of its spaces, the harmony of its proportions and the integrity of its materials serve as a framework for students and teachers to develop their full potential."

Doña Márgara Garza Sada de Fernández (✝)
President of the Advisory Council of the Roberto Garza Sada Center of Art, Architecture and Design

The logo and signage of the building are creation of the prestigious design firm Pentagram (New York).
“La Serpentina,” by sculptor Fernando González Gortázar, stands on the Esplanade in front of the Rectory building.

The University Community Center is the venue for training activities.

About UDEM

Universidad de Monterrey (UDEM) is a higher education institution of Catholic inspiration.

With 45 years of tradition, through its academic programs, accredited by the Southern Association of Colleges and Schools (SACS), it provides its students with the skills, aptitudes and knowledge required to function as successfully and competent professionals, for which impels them to developed in multicultural environments and innovate in their field and propose solutions using a critical sense and using cutting edge technology.

At the same time, and thanks to the all-around education that fosters, UDEM promotes the importance of transcending life through service, be persons of integrity in all circumstances, and be sensitive to their own and needs of others to ensure a sustainable society, maintaining constructive relationships.

It currently offers five baccalaureate programs, 44 professional careers, 12 Masters, seven graduate specialties and 35 medical specialties.

As part of its evolution, and aiming to develop creativity, innovation and appreciation of aesthetics among its students, in April 24, 2013, it inaugurated the Roberto Garza Sada Art, Architecture and Design Center.

The Central Library of the campus, by the architect Bernardo Hinojosa, won the 2004 Cemex National Building Award.
Don Roberto Garza Sada (1895-1979)

The Center is named after Don Roberto Garza Sada as a tribute to who had left in the Universidad de Monterrey a trace of his generous spirit and willingness to boost cultural development of our community.

The CRGS, without a doubt, crystallizes his greatest passions. Engineer by profession, Don Roberto Garza Sada was, by his works and personal talents, an architect, a designer and an artist; an innovative, compassionate and generous spirit that marked his period and his surroundings.

He starred in the founding and development of the largest companies among which Groupo Cervecería (nowadays Cuauhtémoc Moctezuma Heineken), Hojalata y Lámina (nowadays Ternium), Empaques de Cartón Titán and Compañía Financiera General de Aceptaciones stand out.

A man of great human qualities, who worried about improving the lives of its workers, he conceived initiatives such as the construction of residential homes for workers and Clínica Nova.

His aspirations exceeded the sphere of the company in order to generously overturn towards the promotion of art, education and culture.

He led the Universidad de Monterrey, from which he was a great benefactor, donating funds required to set the UDEM campus and its first buildings.

He had a very outstanding effort as patron and as a cultural promoter; among many examples we can mention the creation of the Planetario Alfa, located in the municipality of San Pedro Garza García.

Passionate about art, he awarded scholarships to musicians from abroad and brought to Monterrey countless tokens of diverse cultural expressions.

“Entropía”, inaugurated in 1994, was created by sculptor Jorge Elizondo as a tribute to the founders of UDEM.
The Roberto Garza Sada Center was designed by Tadao Ando, Pritzker Prize 1995, and one of the most renowned architects in the world. Anyone who has agreed to design this building reflects the importance of the project.

Tadao Ando was born in 1941 in Osaka, Japan. Unlike most contemporary architects, Ando is self-taught, so he trained architecture through books and through extensive travels in Europe, Africa, Asia and America.

In 1969, he established the company Tadao Ando Architect & Associates and since then, has been recognized for his numerous works in Japan and other countries.

Amongst his awards, which include every prize Japan grants to architecture and arts, as well as major international prizes, are included: the Pritzker, Royal Gold Medal given by the Royal Institute of British Architects (RIBA), the Gold Medal of Architecture by the French Academy of Architecture, the AIA Gold Medal by the American Institute of Architects and the UIA Gold Medal by the International Union of Architects.

His work is based on the use of simple geometric shapes that combine with light to create spaces whose use transcends the construction itself.

He has been a guest professor at Harvard University and professor at the Universities of Tokyo and Yale as well as depositary of a Cátedra Laboris, the highest honor that Universidad de Monterrey gives to external teachers.

Some of his representative works in Japan:
- Church on the Water, 1988, Hokkaido
- Church of the Light, 1989, Osaka
- Rokko Housing, 1993, Kobe
- Naoshima Contemporary Art Museum, 1995, Naoshima
The building is 99 meters long and 27 wide; has 13 thousand square meters of construction divided into six levels, each of which has a height of 5.40 meters.

The construction process lasted 34 months and followed the requirements of LEED certification, which verifies the degree of sustainability of the building and recognizes the use of strategies to decrease the environmental impact of the construction industry.

The total investment of the project was 45 million dollars, from a wide number of benefactors, led by Doña Garza Sada Márgara de Fernandez (+).

Over 2,600 people from 10 different nationalities worked in this project which used a little more than 3,500 tons of steel and 14,800 cubic meters of concrete for the edification.

Despite its size, the CRGS is considered an artisanal building. In addition to being built in exposed concrete, a technique that leaves the material exposed and without coating, it was made without precast parts, so they were all made on site.

Inside the building we can appreciate how the architect played with spaces, light entrances and high ceilings. He also joined nature to create a space for meditation, serenity and spirituality. In the case of CRGS, the gray concrete color simulates the mountains of the metropolitan area of Monterrey.
“I wanted to create a gate that gave a welcome to students that come to develop their talents in this school, also interior spaces that push their imagination for creative work.”

Tadao Ando (Osaka, 1941)
Creator of the Roberto Garza Sada Center
One of the aspects that distinguish the building is the series of pleats that simulate a folded piece that has been called “The Sail” (sometimes referred to as the Shell).

It is composed by two membranes, one inside and one outside, in order to accommodate the structural systems, storm and heat insulation. The exterior is apparent concrete cast in place. The interior is made from cement panels.

“The Sail” has a geometry that forms the iconic building element. Both sides have the same geometry, but its reading and scale generate different perceptions.

At the point where both wings meet the height is 17 meters and each of the folds has a different size and shape: the longest fold measures 77 meters in length.

For its construction, master cabinetmakers who prepared molds to form the folds were hired.

"La Sail"

There are 17 meters high from floor to apex binding the two “veils”.

For its construction, master cabinetmakers who prepared molds to form the folds were hired.
The Roberto Garza Sada Center has three galleries on the eastern side dedicated to showcasing the best in art, architecture and design.

Gallery 1 is located on the first level and gives priority to projects done by students, due to the high traffic it has and the projection that can be given to their works.

The other two are located on the second floor, facing each other. While Gallery 2 is a space to display special projects of renowned guest artists, the opposite space is dedicated to Tadao Ando, CRGS’s architect and many other projects that reflect his contribution to world of architecture.

In Tadao Ando’s gallery, who personally supervised the curatorship, you can see the original model of the building, which at the time was exhibited in Japan, as well as various photographs and strokes that show the evolution of this project.

The best of UDEM students work has been exhibited in Gallery 1, located off the main lobby.
Amphitheaters

Inspired by the concept of the ancient Greek plazas where teachers worked with his disciples and discussed publicly, in the Roberto Garza Sada Center there’s two open spaces of this type with great natural light, located on the east and west building.

The East Amphitheatre, with average height and a semicircle of 180 degrees, is located on the fourth floor, the first level where there is no connection between both wings of the building. From the top of this amphitheatre the rest of the Universidad de Monterrey campus and the iconic Cerro de La Silla can be seen.

On the other hand, the West amphitheatre occupies an entire level height (from the fourth to fifth floor); has 90 degrees of openness, and as view La Huasteca Canyon.

Although its dimensions are different, both areas were built in a single pour of concrete, which gives them a great structural strength allowing them to stand without difficulty. In addition, they work as circulation areas that suggest to those who go by to take over their geometries for different spontaneous activities.

This way, students and teachers can sit peacefully to discuss a point, share knowledge and experiences, prepare a class or just hang out.

In the East Agora, teachers and students learn and share experiences.
Multiple use areas

The Roberto Garza Sada Center has different application areas and to do presentations: the Multi-purpose Room, the classroom of Critique and the Showroom.

The Multi-purpose Room, located on the fourth floor, is a versatile space that holds presentations, meetings, project presentations, conferences, exhibitions and all kinds of events.

Meanwhile, the classroom of Critique, located on the fifth floor, is a reference of CRGS for its particular multilevel architectural design, and because from the back of each, one has a complete view of the place. It has hosted major events, especially lectures with personalities of art, architecture, design and other areas who talk with students about current issues, as well as his outstanding professional experience.

Also used as a classroom, the Showroom, located on the fifth floor, has housed in its interior several exhibitions of both national and international standing, conferences and meetings.
In the careers of Architecture, Arts, Graphic Design, Industrial Design, Interior Design, and Textile Design and Fashion, the theoretical component is important, but the practice is fundamental. This are occupations where the daily work shapes the expert.

That led Universidad de Monterrey to recover the style of the workshops of the great artists of the Renaissance: business practice, ask the classmate, get the expert advice and discover the skills so that the experience and knowledge of the "master" are combined with the potential and talent of the "disciple".

This is how in the fourth and fifth floor of Roberto Garza Sada Center the majority of the twenty laboratories and workshops of different areas that have equipment and machinery with technology are placed.

In each workshop, whether photographic, textile, wood, three-dimensional molding, digital cutting, ceramic or metal and welding, proactivity is an indispensable element for developing activities.

In each of these areas there is a responsible in charge for all technical issues of equipment and materials, and a teacher dedicated to direct students in their assignments and projects.

The UDEM environmental commitment is also reflected in the use of non-toxic materials.
The sixth and last floor of CRGs is dedicated, almost entirely, to workspaces.

More than 300 outstanding students of the Division of Arts, Architecture and Design have its own area for a year to work on their projects. Students are chosen through a competition, which show the greatest potential, capacity and performance are selected.

Each of these areas has the required furniture for the high performance student to perform their tasks and work: chair, desk, lamp and a lock drawer to store materials.

From the architectural point of view, this is the only floor where there are no windows to the outside, so the masterful use of daylight is most evident.

On each side of the building are also found cubicles of our, nationally and internationally, renowned professors.

To use these individualized spaces is not subject to schedules allowing a freer creative process.
As an architectural contribution, the Roberto Garza Sada Center has earned significant recognition within and outside of Mexico:

- Silver level LEED certification, given by The U.S. Green Building Council (USBCG).
- Award by the jury as “Best New Public Building” in the Wallpaper* Design Awards 2014.
- Obras Cemex award: first international prize in the category “Industrial Institution”, and first nationally in the category “Building Educational and Cultural.”
- Work of the year in the category “Building” of the magazine “Obras” from Grupo Editorial Expansión.
- Overall winner (Double Gold Medal) and Gold Medal in the category Sustainability of the North America region VII Biennial Iberoamericana CIDI Interior Design & Landscaping, granted by the Latin American Council of Interior Designers, A. C.
- CIDI Iberoamericana Award, emblematic work of the year in the category “Education”, from the Latin American Council of Interior Designers and the Pan American Federation of Educational Institutions of Interior Design.
- Absolut winner of the XVII Bienal de Arquitectura de Nuevo León with the Calli award in the category “Education”, granted by the College of Architects of Nuevo León.
- Special Mention (Highly Commended) in category “Higher Education and Research” of the World Architecture Festival 2013 held in Singapore.

To the building

To academic work

The educational model of CRGS has allowed students to stand out in national and international competitions:

**Architecture**

- First place of XII Great Prize of Young Architecture, organized by the National Academy of Architecture, *Capítulo Monterrey*.
- First place of 3rd Regional Meeting of Students of Architecture, virtual modality, organized by the Faculty of Architecture, Design and Urbanism of the *Universidad Autónoma de Tamaulipas*, Tampico-Madero campus.
- “Special Mention at the individual stage” and “Special Mention for better graphic representation” in the 26th National Meeting of Students of Architecture, organized by the Faculty of Architecture at the *Universidad Autónoma del Estado de Morelos* and the *Asociación de Instituciones de la Enseñanza de la Arquitectura de la República Mexicana*.
- Silver Medal and Crystal Calli in category “Education”; Silver Medal in the categories “Average house”, “Mixed use” and “Urban Design”, and Honorable Mention in the Third Biennial Student Architecture from *Colegio de Arquitectos de Nuevo León, A. C.*

**Graphic Design**

- Award al Diseño in the student category “Identity” and Silver Mention in the student category “Packaging” and “Poster” in the 2013 issue of *Premio al Diseño*.
- Merit and Merit Winner in the student category of the International Design Awards 2013 from prestigious magazine How.
- First place in the categories “Multimedia” and “Poster” of the 2013 design and sustainability competition “Eco-Ideas”, organized by *Transformadora Ciel* and Architectural Digest.
- Winner of the fourth edition of the national contest “Etiquetas Indio”, organized by Cuauhtémoc Moctezuma.

**Industrial Design**


**Interior Design**

- First place of the 5th Inter-University Student Competition Interior Design, organized by the Mexican Society of Interior Designers, A.C.