

# **In atenția studentilor de la specializările IA, I, IAG, MI**

Sunteți invitați să va inscrieți la cursurile din programul

**"Joia după-masă la facultate"!**

## **Cine susține cursurile?**

Specialiștii din cadrul companiilor IT:

- 1. CANAM GROUP INC.**
- 2. SIEMENS INDUSTRY SOFTWARE**
- 3. Data Revolt Agency**

## **În ce perioadă?**

Semestrul al 2-lea al anului universitar 2025-2026, joia după-masă.

## **Termen de înscriere: 16.02.2026**

## **Cum aplici?**

Trimite un email cu **CV-ul și titlul cursului** la care dorești să te înscrii, la adresa de email a firmei sau scaneaza codul.

## 1. CANAM GROUP INC.

Email pentru înscrieri: [careersro@canam.com](mailto:careersro@canam.com)

**Locație:** Str. Ionescu Crum nr. 9, Sala de training, Brașov

**Durată:** 10 cursuri

### Building Through Programming

Cursul "Building Through Programming", organizat de Canam are la baza concepte moderne de programare in C# si modalitati de aplicare a matematicii in dezvoltarea 3D.

Data de incepere a cursului este 9 martie 2026, iar termenul limita pentru trimitera CV-urilor este 16 februarie 2026.

Pentru inscriere, studentii trebuie sa trimita un email la adresa [careersro@canam.com](mailto:careersro@canam.com) cu subiectul **"Inscriere curs joi dupa-masa"** si sa ataseze un **CV actualizat**.

**BUILDING THROUGH PROGRAMMING**

Don't just learn to code. Learn to build for the modern construction industry with 3D tech, applied math, and hands-on projects.

**Course Structure:**

**Coding Knowledge**

- Object-Oriented Programming - Apply core OOP concepts in C# using Visual Studio
- Web API - Build and consume APIs using REST architectural style
- Automated Testing - Understand testing strategies and create effective unit tests

**Applied Math in 3D**

- 3D Meshes - Learn how computers "see" the 3D space
- Extrusion in a 3D environment - From a 2D shape to a 3D object
- Creation of realistic profiles - Apply geometry to make complex shapes
- Creation of genuine steel pieces in a 3D space - Using real steel profiles

**INSCRI-TE**

[careersro@canam.com](mailto:careersro@canam.com) Strada Ionescu Crum nr. 9, Sala de training

Timp total estimat: 20 ore, 2 ore/săptămână Locuri disponibile: 12

**CANAM**

## 2. SIEMENS INDUSTRY SOFTWARE



**Companie: SIEMENS INDUSTRY SOFTWARE**

**Locație:** Bld. Gării, nr. 13A, Clădirea Nine, Brașov

**Durată:** 10 cursuri, săptămânal, joia de la 16.30, începând din luna martie 2026

**Formular de înscris:** <https://forms.office.com/r/vS2KQ11Rdy>

**Termen limită înscris:** 16 februarie 2026

### Structural Optimization Using Genetic Algorithms

The manufacturing field faces the problem of optimizing the amount of material used for packing their products. Architects and engineers in their day-to-day work need to reconsider repeatedly different scenarios to find the best solution while designing structures. Today the optimization calculations are done manually, and the process ends up most of the time with a compromise. With manual calculations it is extremely hard to design both a resistant and low-priced structure. In the last few years, Artificial Intelligence techniques have shown remarkable improvements in optimization problems, helping professionals in their day-to-day work.

In the case of optimization of physical structures, the answer came quickly using genetic algorithm methods.

The usage of genetic algorithms in structural optimization helps with:

- a qualitative improvement of components
- a significant reduction of material and production costs
- a shorter time required in product design process.

The objective of the project is to develop genetic algorithms based on mathematical methods that solve structural optimization problems satisfying multiple design constraints. At present, the tendency is to create a structure with more support than needed just to guarantee safety. Unfortunately, this implies greater weight on the structure and greater costs for building and shipping. The project aims

to provide solutions that optimize the balance between costs, structural performance, reliability, and safety.

Working on this project exposes the software developers to concepts such as: finite element analysis, finite element method, structural optimization, meshing, constraints, forces, space geometry, structural optimizations, simulations, and Genetic Algorithms.

Using Project Chrono - an open-source C++ library for physics simulations - software developers will be able to test the evolutionary algorithm and graphically visualize the obtained results.

### 3. DATA REVOLT AGENCY

**Locație:** Corp P, Facultatea de Matematica si Informatica, Brașov

Class name:

**Data Marketing: Track, Visualize, Analyze & Automate**

Registration email: [eliza@datarevolt.agency](mailto:eliza@datarevolt.agency)

**Brief description:**

Data Marketing is like uncovering the software architecture behind customer decisions — it turns user behavior into measurable, analyzable, and optimizable data. It's where tracking meets UX, analytics meets code, to extract actionable insights that drive smarter decisions.

Class length: 6 weeks, starting on 19th of March

#### 1) Tracking - How to find the data

- **The Engine Behind Smart Data.** Introduction to Google Tag Manager (GTM). Understanding how tracking scripts interact with the browser without touching the backend.
- **DOM Scraping & Advanced Injection.** Using **CSS Selectors** and **Custom JavaScript** to intercept user actions. Working with the Data Layer and Custom HTML tags to capture granular data.

#### 2) Visualizing - How to see beyond data

- **Show Me the Data & UX Debugging.** Deep dive into **Google Analytics 4** (GA4). Using data patterns to identify **UI bugs** and friction points in the user journey.
- **You Decide What Matters.** Building Custom Reports in GA4 and connecting sources to **Looker Studio** for real-time visualization.

#### 3) Analyzing & Automation - How to take advantage of data

- **Optimization & Refactoring.** Using data to refactor UI/UX logic. Advanced platform linking (GA4 + Ads) to close the data loop.

- **Python & Technical Automation Showcase.** Unlocking insights with Python Libraries. This industry is not just about analyzing data—it's about building solutions. We will showcase internal projects to prove there is room for technical development. You will see how we engineer **custom tools and pipelines** to solve problems standard tools can't.