**UNIVERSITATEA "LUCIAN BLAGA" DIN SIBIU**
***"LUCIAN BLAGA" UNIVERSITY OF SIBIU***
Facultatea de Ştiinţe
*Faculty of Sciences*
Domeniul: Matematică
*Main field of study: Mathematics*
Programul de master: Matematică Informatică Aplicată
*Programme title: Applied Mathematics Informatics*
Program de studiu de tip: Master profesional
*Study programme: Professional master*
Limba de predare: Română
*Teaching language: Romanian*

**Valabil** / *Valid*

începând cu anul universitar 2021-2022
*starting with the academic year 2021-2022*
pentru anul universitar 2021-2022
*for the academic year 2021-2022*

# PLAN DE ÎNVĂŢĂMÂNT / *CURRICULUM*

**ANUL II***1st YEAR*

1 Credit = 25

**Centralizare/verificare/corelare cu fişele disciplinelor**

| Nr. Crt. *No.* | Disciplina *Subject* | Cod *Code* | Semestrul 1/ *1st Semester* | | | | | | | Semestrul 2/ *2nd Semester* | | | | | | | NOSI/ sem |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | AI | | | | AP | N | Ver. *Eval.* / Cred. *Cred.* | AI | | | | AP | N | Ver. *Eval.* / Cred. *Cred.* | |
| | | | C | S | L | P | | | | C | S | L | P | | | | |
| 1.1 | Generarea de soft matematic si educational si modele ale cautarii informatice / Generation of mathematical and educational software and models of informatics search | FSTI.MAI.MIA.M.SO.1.1020.E-6.1 | 1 | | 2 | | | | Examen 6 | | | | | | | | 108 |
| 1.2 | Functii spline si aplicatii / Spline functions and applications | FSTI.MAI.MIA.M.SO.1.2010.E-6.2 | 2 | | 1 | | | | Examen 6 | | | | | | | | 108 |
| 1.3 | Programarea retelelor de calculatoare; modelare / Computer network programming; modeling | FSTI.MAI.MIA.M.SO.1.1020.E-6.3 | 1 | | 2 | | | | Examen 6 | | | | | | | | 108 |
| 1.4 | Modelare matematica cu ajutorul aplicatiilor conforme / Mathematical modeling using conformal maps | FSTI.MAI.MIA.M.SO.1.1200.C-6.4 | 1 | 2 | | | | | Colocviu 6 | | | | | | | | 108 |
| 1.5 | Geometrie computationala / Computational geometry | FSTI.MAI.MIA.M.SO.1.1100.C-6.5 | 1 | 1 | | | | | Colocviu 6 | | | | | | | | 122 |
| 2.1 | Programarea aplicatiilor cu Microsoft Visual Studio C# / Applications programming using Microsoft Visual Studio C# | FSTI.MAI.MIA.M.SO.2.1020.E-6.1 | | | | | | | | 1 | | 2 | | | | Examen 6 | 108 |
| 2.2 | Optimizare neliniara / Nonlinear optimization | FSTI.MAI.MIA.M.SO.2.1020.E-6.2 | | | | | | | | 1 | | 2 | | | | Examen 6 | 108 |
| 2.3 | Aproximare prin operatori liniari / Approximation by linear operators | FSTI.MAI.MIA.M.SO.2.2010.E-6.3 | | | | | | | | 2 | | 1 | | | | Examen 6 | 108 |
| 2.4 | Functii eliptice / Elliptic functions | FSTI.MAI.MIA.M.SO.2.1100.C-5.4 | | | | | | | | 1 | 1 | | | | | Colocviu 5 | 97 |
| 2.5 | Metode numerice in algebra liniara / Numerical methods in linear algebra | FSTI.MAI.MIA.M.SO.2.1200.C-4.5 | | | | | | | | 1 | 2 | | | | | Colocviu 4 | 58 |
| 2.6 | Practica de specialitate / Practical activity | FSTI.MAI.MIA.M.SO.2.P.C-3.6 | | | | | | | | | | | | 60* | | Colocviu 3 | 15 |
| **TOTAL** | | | **6** | **3** | **5** | | | | **3E+0V+ 2C+0P 30** | **6** | **3** | **5** | | | | **3E+0V+ 3C+0P 30** | **1048** |
| **TOTAL ORE PE SĂPTĂMÂNĂ/** *TOTAL NUMBER OF HOURS/WEEK* | | | **14** | | | | | | | **14** | | | | | | | |
| | | | **14** | | | | | | | **14** | | | | | | | |
| | | | **14** | | | | | | | **14** | | | | | | | |

| 3.2.a. C | 3.2.b. S | 3.2.c. L | 3.2.d. P | AP | N | 3.3. NOSI/ sem | 3.4. NOAD/ sem. | 3.5. NOAD + NOSI | 3.6. Cred. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | 2 | | | | 108 | 42 | 150 | 6 |
| 2 | | 1 | | | | 108 | 42 | 150 | 6 |
| 1 | | 2 | | | | 108 | 42 | 150 | 6 |
| 1 | 2 | | | | | 108 | 42 | 150 | 6 |
| 1 | 1 | | | | | 122 | 28 | 150 | 6 |
| 1 | | 2 | | | | 108 | 42 | 150 | 6 |
| 1 | | 2 | | | | 108 | 42 | 150 | 6 |
| 2 | | 1 | | | | 108 | 42 | 150 | 6 |
| 1 | 1 | | | | | 97 | 28 | 125 | 5 |
| 1 | 2 | | | | | 58 | 42 | 100 | 4 |
| | | | | 60 | | 15 | 60 | 75 | 3 |
| **12** | **6** | **10** | | **60** | | **1048** | **452** | **1500** | **60** |

**Rector**/*Rector* ,
Prof.univ.dr.habil.Sorin RADU

**Decan**/*Dean,*
Conf.univ.dr. Florin SOFONEA

**Director Departament**/Head of Department,
Prof.univ.dr.Mugur ACU

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**PLAN DE ÎNVĂŢĂMÂNT** / *CURRICULUM*

**ANUL 2/** 2nd *YEAR*

1 Credit = 25

**Centralizare/verificare/corelare cu fişele disciplinelor**

| Nr. Crt. *No.* | Disciplina *Subject* | | Cod *Code* | Semestrul 1/ *1st Semester* AI C | S | L | AP P | N | Ver. *Eval.* | Cred. *Cred.* | Semestrul 2/ *2nd Semester* AI C | S | L | AP P | N | Ver. *Eval.* | Cred. *Cred.* | NOSI/ sem | 3.2.a. C | 3.2.b. S | 3.2.c. L | 3.2.d. P | AP | N | 3.3. NOSI/ sem | 3.4. NOAD / sem. | 3.5. NOAD + | 3.6. Cred. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.1 | Dezvoltarea sistemelor infomatice cu SQL Server si Oracle / Development of information systems using SQL Server and Oracle | | FSTI.MAI.MIA.M.SO.3.1020.E-7.1 | 1 | | 2 | | | Examen | 7 | | | | | | | | 133 | 1 | | 2 | | | | 133 | 42 | 175 | 7 |
| 3.2 | Matematici actuariale si financiare / Actuarial and financial mathematics | | FSTI.MAI.MIA.M.SO.3.1200.E-6.2 | 1 | 2 | | | | Examen | 6 | | | | | | | | 108 | 1 | 2 | | | | | 108 | 42 | 150 | 6 |
| 3.3 | Etica si integritate academica / Ethics and academic integrity | | FSTI.MAI.MIA.M.SO.3.1000.C-4.3 | 1 | | | | | Colocviu | 4 | | | | | | | | 86 | 1 | | | | | | 86 | 14 | 100 | 4 |
| 3.4 | Modelare stohastica si statistica aplicata / Stochastic modeling and applied statistics | Optional 1 | FSTI.MAI.MIA.M.SA.3.2010.E-7.4 | 2 | | 1 | | | Examen | 7 | | | | | | | | 133 | 2 | | 1 | | | | 133 | 42 | 175 | 7 |
| 3.5 | Procese stohastice / Stochastic processes | | FSTI.MAI.MIA.M.SA.3.2010.E-7.5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.6 | Analiza Fourier si functii speciale / Fourier analysis and special functions | Optional 2 | FSTI.MAI.MIA.M.SA.3.1200.C-6.6 | 1 | 2 | | | | Colocviu | 6 | | | | | | | | 108 | 1 | 2 | | | | | 108 | 42 | 150 | 6 |
| 3.7 | Capitole speciale de analiza functionala / Special chapters of functional analysis | | FSTI.MAI.MIA.M.SA.3.1200.C-6.7 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.1 | Sisteme dinamice ergodice / Ergodic dynamical systems | | FSTI.MAI.MIA.M.SO.4.1200.E-4.1 | | | | | | | | 1 | 2 | | | | Examen | 4 | 58 | 1 | 2 | | | | | 58 | 42 | 100 | 4 |
| 4.2 | Masura Hausdorff si fractali Hausdorff measure and fractals | | FSTI.MAI.MIA.M.SO.4.2010.E-4.2 | | | | | | | | 2 | | 1 | | | Examen | 4 | 58 | 2 | | 1 | | | | 58 | 42 | 100 | 4 |
| 4.3 | Elaborarea lucrarii de disertatie / Preparation of dissertation thesis | | FSTI.MAI.MIA.M.SO.4.0100.C-10.3 | | | | | | | | | 1 | | | | Colocviu | 10 | 236 | | 1 | | | | | 236 | 14 | 250 | 10 |
| 4.4 | Algebra computationala / Computational algebra | Optional 3 | FSTI.MAI.MIA.M.SA.4.1020.E-4.4 | | | | | | | | 1 | | 2 | | | Examen | 4 | 58 | 1 | | 2 | | | | 58 | 42 | 100 | 4 |
| 4.5 | Metode predictive in sistemele de calcul cu aplicatii web / Predictive methods in computing systems with web applications | | FSTI.MAI.MIA.M.SA.4.1020.E-4.5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.6 | Cercetari operationale Operations research | Optional 4 | FSTI.MAI.MIA.M.SA.4.1200.C-4.6 | | | | | | | | 1 | 2 | | | | Colocviu | 4 | 58 | 1 | 2 | | | | | 58 | 42 | 100 | 4 |
| 4.7 | Modele matematice in stiintele vietii Mathematical models in life sciences | | FSTI.MAI.MIA.M.SA.4.1200.C-4.7 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.8 | Matematici experimentale Experimental mathematics | Optional 5 | FSTI.MAI.MIA.M.SA.4.1010.C-4.8 | | | | | | | | 1 | | 1 | | | Colocviu | 4 | 72 | 1 | | 1 | | | | 72 | 28 | 100 | 4 |
| 4.9 | Coduri detectoare si corectoare de erori / Error detection and correction codes | | FSTI.MAI.MIA.M.SA.4.1010.C-4.9 | | | | | | | | | | | | | | | | | | | | | | | | | |
| **TOTAL** | | | | **6** | **4** | **3** | | | **3E+0V+ 2C+0P** | **30** | **6** | **5** | **4** | | | **3E+0V + 3C+0P** | **30** | **1108** | **12** | **9** | **7** | | | | **1108** | **392** | **1500** | **60** |
| **TOTAL ORE PE SĂPTĂMÂNĂ**/ *TOTAL NUMBER OF HOURS/WEEK* | | | | **13** | | | | | | | **15** | | | | | | | | | | | | | | | | | |
| | | | | **13** | | | | | | | **15** | | | | | | | | | | | | | | | | | |
| | | | | **13** | | | | | | | **15** | | | | | | | | | | | | | | | | | |

**Rector/***Rector*,
Prof.univ.dr.habil.Sorin RADU

**Decan/***Dean,*
Conf.univ.dr. Florin SOFONEA

**Director Departament/**Head of Department,
Prof.univ.dr.Mugur ACU