# Common Pool of Discipline Specific Elective (DSE) Courses for Semester VI

## DISCIPLINE SPECIFIC ELECTIVE COURSE 10–(DSE-10): Media Automation

### Credit distribution, Eligibility and Pre-requisites of the Course

| Course title & Code | Credits | Credit distribution of the course | | | Eligibility criteria | Pre-requisite of the course |
|---|---|---|---|---|---|---|
| | | Lecture | Tutorial | Practical/ Practice | | |
| DSE-10 Media Automation | 4 | 3 | 0 | 1 | Passed Class XII with English | NIL |

### Learning Objectives

The Learning Objectives of this course are as follows:

- To familiarize students with the interconnections between media and automation applications and the ethical issues associated with them. The students will understand the future of the media industries with the induction of AI and Robots.

### Learning outcomes

The Learning Outcomes of this course are as follows:

- By studying this course, students will be able to understand the nature of automation and artificial intelligence with special reference to media industries.
- They will be able to comprehend current trends and developments in news, advertising, social media and political communication with respect to the use of automation, AI, big data and the ensuing ethical challenges and issues.

### SYLLABUS OF DSE-10:

**UNIT – I (15 hours)**

**Unit I: Technologies, Terms and Concepts**

- Big data and the algorithmic world
- Automation Technologies
- Algorithms: what are they, and why do they matter
- Automation in Media industry

**UNIT – II (15 hours)**

**Unit II: Automation Applications**

- Algorithmic journalism and computer assisted reporting
- News bots: automating news and information dissemination
- Digital Advertising and Algorithms
- Social Media Automation
- Political Campaigning and use of Data

**UNIT – III (15 hours)**

**Unit III: Ethical Issues and Challenges**

- Critical perspectives of AI, robots and ethics
- Human-machines communication
- Big Data, surveillance and privacy
- Fake news and open-source journalism

**Practical component: (30 hours)**
The students will prepare a comprehensive report on the media automation applications in the industry. They will write a critical report on the use of Artificial Intelligence and Robots in news and information dissemination.

**Essential/recommended readings:**

1. Gillespie, T. (2016). Algorithm. In B. Peters (Ed.), *Digital keywords: A vocabulary of information society and culture* (pp. 18-30). Princeton: Princeton University Press.

2. Striphas, T. (2012). What is an algorithm? *Culture Digitally*.
3. Beer, D. (2017). The social power of algorithms. Information, *Communication & Society*, 20(1), 1-13 (online first)
4. Napoli, P. M. (2014). On Automation in Media Industries: Integrating Algorithmic Media Production into Media Industries Scholarship. *Media Industries* 1(1).
5. Lokot, T., & Diakopoulos, N. (2015). News bots: Automating news and information dissemination on Twitter. *Digital Journalism*, 4(6), 682-699.
6. Woolley, S. C., & Howard, P. N. (2016). Political communication, computational propaganda, and autonomous agents. *International Journal of Communication*, 10, 9. [Introduction to a special issue: "Automation, Algorithms, and Politics"
7. Gunkel, D. J. (2012). Communication and artificial intelligence: Opportunities and challenges for the 21st century. *Communication+ 1*, 1(1), 1-25.
8. Gunkel, D. J. (2012). *The machine question: Critical perspectives on AI, robots, and ethics*. Cambridge: MIT Press.
9. Lewis, S. C., & Westlund, O. (2016). Mapping the human–machine divide in journalism. In T.Witschge, C. W. Anderson, D. Domingo, & A. Hermida (Eds.), *The SAGE handbook of digital journalism* (pp. 341-353). London: SAGE.
10. Kreiss, D. (2016). *Prototype politics: Technology-Intensive campaigning and the data of democracy.* Oxford: Oxford University Press.
11. Usher, N. (2016). *Interactive journalism: Hackers, data, and code.* Champaign, IL: University of Illinois Press.
12. Anderson, C. W. (2013). Towards a sociology of computational and algorithmic journalism. *New Media & Society*, 15(7), 1005-1021.
13. Lewis, S. C., & Usher, N. (2013). Open source and journalism: Toward new frameworks for imagining news innovation. *Media, Culture & Society*, 35(5), 602-619
14. Lewis, S. C., & Usher, N. (2014). Code, collaboration, and the future of journalism: A case study of the Hacks/Hackers global network. *Digital Journalism*, 2(3), 383-393.

*15.* McCoy, T. (2016, November 20). For the 'new yellow journalists,' opportunity comes in clicks and bucks. *The Washington Post.*

*16.* Boczkowski, P. (2016). Fake news and the future of journalism. *Nieman Journalism Lab*

17. Lewis, S. C., & Westlund, O. (2015). Big data and journalism: Epistemology, expertise, economics, and ethics. *Digital Journalism*, 3(3), 447-466

18. Dörr, K. N. (2015). Mapping the field of algorithmic journalism. *Digital Journalism*, 4(6), 700-722.

**Suggestive readings:**

1. Perlich, C. (2013, May 13). How big data touches YOU: Tales from the digital advertising world. Presentation given at the Governing Algorithms conference in New York.
2. Neff, G., & Nagy, P. (2016). Talking to bots: Symbiotic agency and the case of Tay. *International Journal of Communication*, 10, 17
3. Coddington, M. (2015). Clarifying journalism's quantitative turn: A typology for evaluating data journalism, computational journalism, and computer-assisted reporting. *Digital Journalism*, 3(3), 331-348.
4. Bucher, T. (2016). 'Machines don't have instincts': Articulating the computational in journalism. *New Media & Society*, 1461444815624182
5. Kraemer, F., Overveld, K. V., & Peterson, M. (2011). Is there an ethics of algorithms? *Ethics and Information Technology*, 13(3), 251-260